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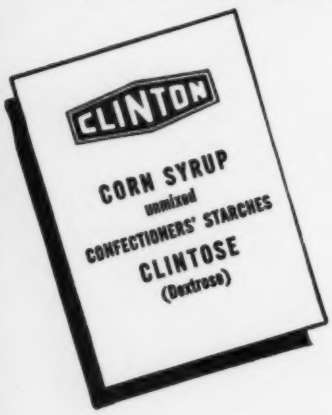

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CONFECTIONERY ANALYSIS and COMPOSITION

By

STROUD JORDAN, M.S., Ph.D.

and

KATHERYN E. LANGWILL, M.S., Ph.D.

$3.50

The first two volumes of "Confectionery Studies" by Dr. Jordan, have acquainted the confectioner with everyday problems and with standards in effect at the date of publication. A practical and technical evaluation of chocolate products then followed entitled "Chocolate Evaluation". These three books were willingly received by the industry as valuable additions to the technical literature available.

This book, the fourth in the series, is being published by *The Manufacturing Confectioner*. Confectionery studies have been continued and this volume concerns itself, first with applicable data that cover the composition of basic raw materials as well as that of the finished confections in which they have been employed.

In assembling this volume reference is made to applicable methods. Where satisfactory methods of analysis are of general knowledge they are incorporated by reference. All specially developed methods and procedures are incorporated in detail.

Where reconstruction of formulas from analytical data is considered, we are dealing with a relatively unexplored field. Many basic assumptions have been made before actual formula reconstruction has taken place. The second part of this volume is used to consider the several confection groupings into which most confection types generally fall and full discussion of each follows. See Chapter Headings below.

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COVER: Closeup view of candy being tranferred from the cooling tunnel belt to the bulk boxes, at Rosemarie de Paris, Inc., New York City. For additional data, see photo-study article starting on page 39. (Photo courtesy J. W. Greer Co.)

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a big 640-page book of candy "know how"

CANDY PRODUCTION: METHODS AND FORMULAS, is a big, 640-page, extra-helpful book designed to give practical "know-how" answers to problems of candy manufacture. Walter L. Richmond, the author, is superintendent for Garrott Candy Company and for Jane Garrott Candies, Inc., of St. Paul, Minn.

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LETTERS to the MC editors

Storage of Hard Candy

We manufacture candy made of 75 per cent sugar and 25 per cent corn syrup. We are interested in storing this candy in 15-and 30-pound tins. Can you inform us what the most suitable temperature and humidity would be for this purpose? Perhaps you can also inform us of some air conditioning firms that specialize in this work.

—Pennsylvania

REPLY: We would say that you will need quite dry air in packaging of hard candies, a relative humidity of from 35 to 45 per cent is almost essential. The maximum desirable temperature is about 75 F., but we would suggest, a little lower, say about 65 F., for long periods of storage.

You are packing your candies presumably in sealed containers. The packing room should be under definite temperature and humidity control. But after packing, if sealed tightly in moisture-vapor-proof containers, the packages may be stored under almost any kind of humidity conditions, though we would favor moderate temperatures as mentioned.

There are many air-conditioning firms as well as firms specializing in packaging. A helpful list is enclosed for your convenience.

Color Fading in Bon Bons

We are having trouble with color fading in our bon bons, and mint wafers. Although we have tried various colors we have not been able to overcome this fading. Can you advise us how to prevent this trouble.

—Maryland

REPLY: We believe the trouble you are having with the color fading in bon bons and mint wafers is caused by the candies gradually drying which results eventually in the sugar crystallizing. This is perfectly natural and may be expected.

To remedy this trouble, we would suggest the incorporation of glycerin in your products. Invert sugar would be a possible solution though we favor the use of glycerin. We might suggest that you try adding a small amount of glycerin to the batches when they have been cooked to temperature. We cannot advise on the amount you will need as we do not have any idea of the formula you are using. We would say start with about 1 per cent and then if necessary, increase.

Hand Rolled Coffee Creams

We are anxious to get a formula for making hand-rolled coffee creams for chocolate dipping.

—Colorado

REPLY: We suggest that you try the following formula for making a small batch of Hand-Rolled Coffee Creams for chocolate dippings:

9 lbs. granulated sugar.
1 lb. standardized invert
2½ lbs. 20% cream
¼ lb. water
1 tsp. Convertit
1 lb. Frappe
2 tsp. salt
Flavor and color

Put invert, cream and water in a kettle, add the sugar and mix well. Heat with stirring until it boils. Cook to 244 F. Pour batch on clean open-type beater, and sprinkle lightly with water. When cooled to about 100 F., start beating. Add Convertit and

(*Please turn to page* 79)

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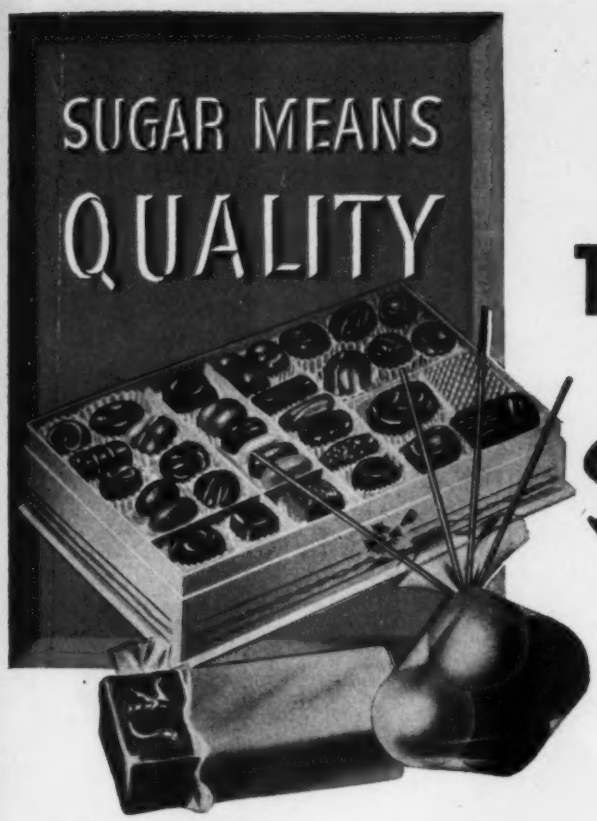

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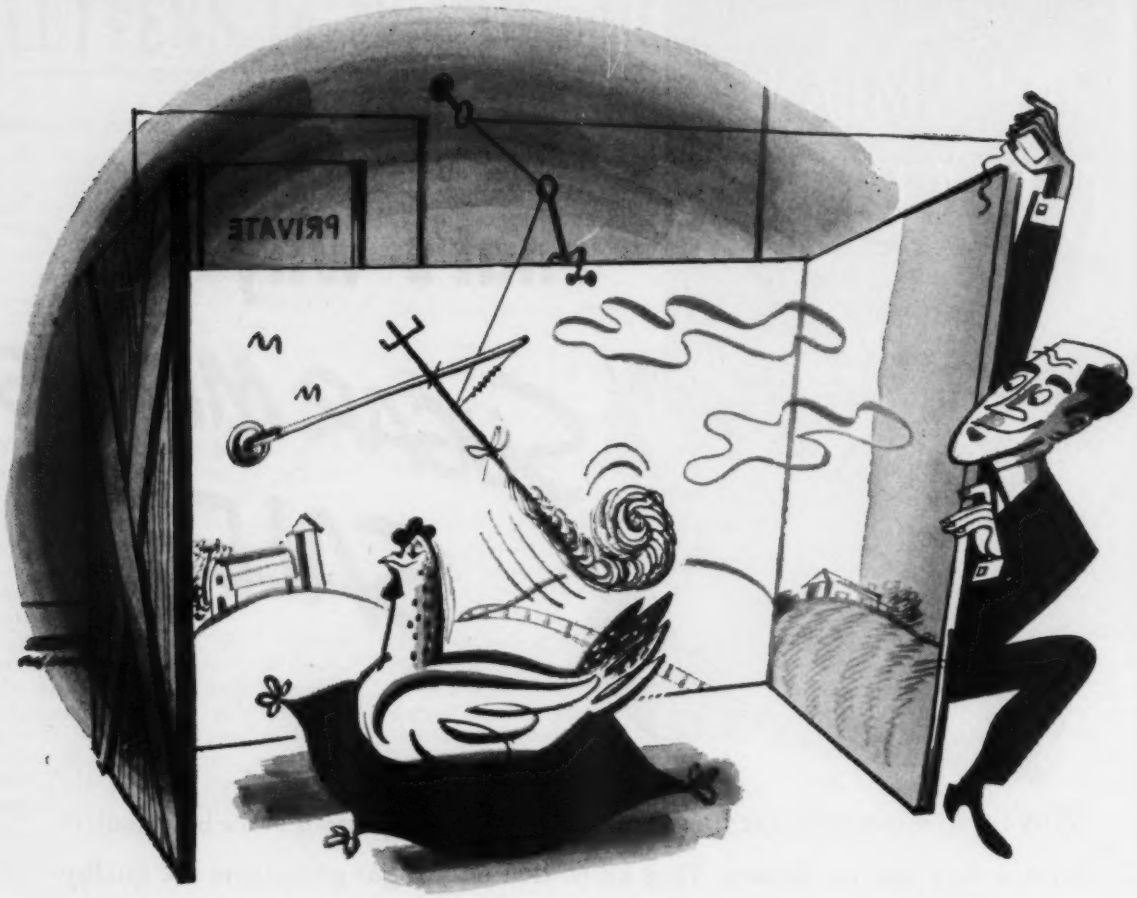

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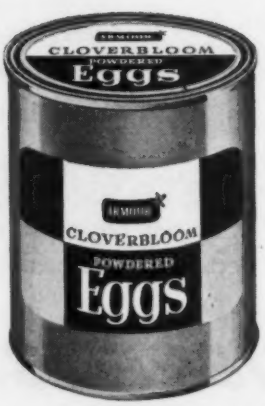

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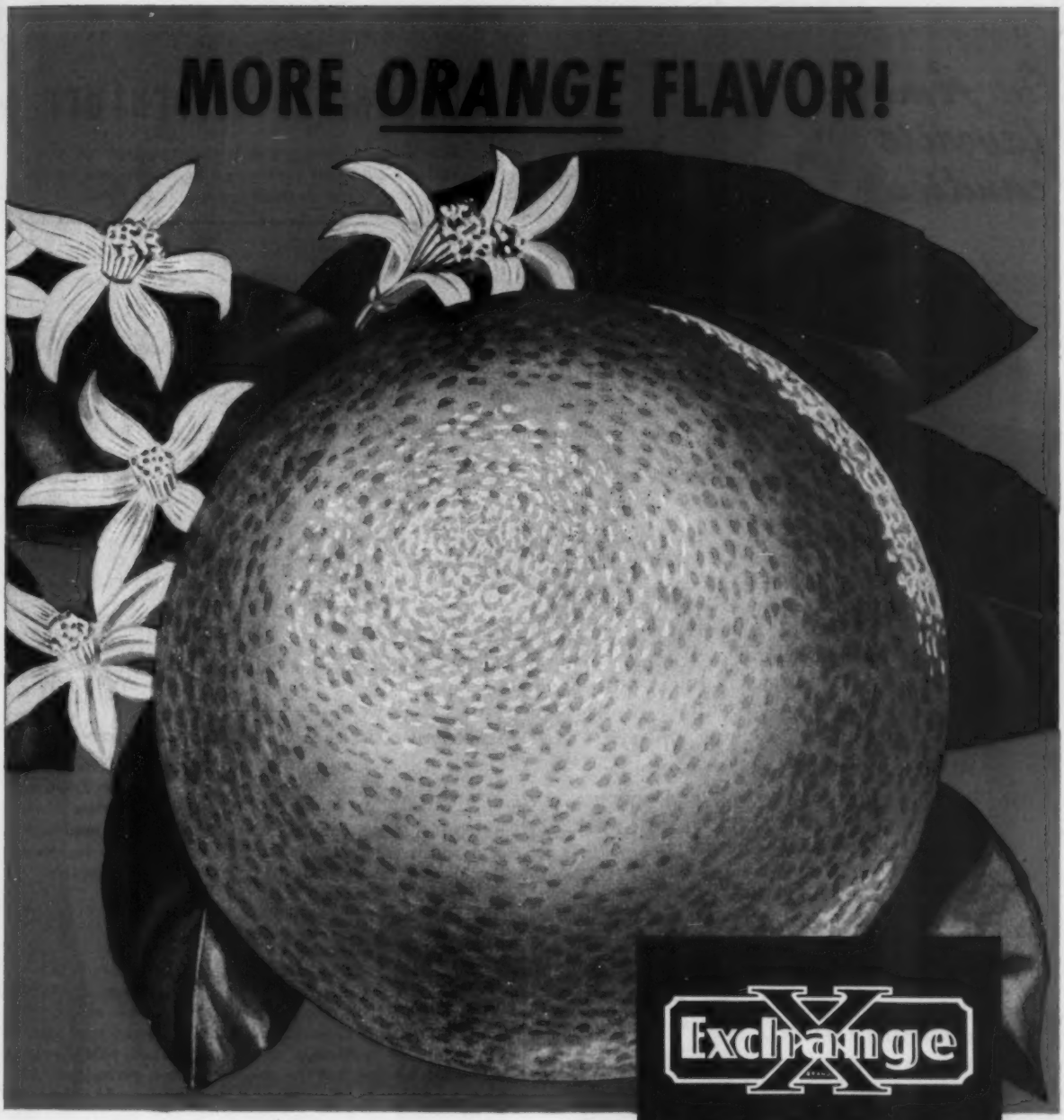

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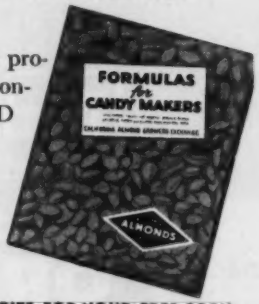

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A Digest of

Technical Literature

World-wide developments and research in confectionery and food processing techniques are noted for confectionery manufacturers.

Laboratory Color Test for Diagnosis of Swollen Shoot of Theobroma Cacao

B. L. Hancock, Tropical Agriculture, Vol. 26, *Nos.* 1-6, (1949)—(*A Trinidad, BWI, publication*)—Swollen shoot of cacao can be demonstrated by the more rapid coloring of sections of stems immersed in anhydrous acidified methyl alcohol, this paper reports. "The increased rate of coloring is small and owing to the uncontrolled variation it is necessary to make a number of observations and assess the results statistically," reports the author. "In practice 16 pairs of observations on suspected and healthy stems are made and the significance of the results is estimated by a simple application of the "t" test." Other findings: "The test can be applied to stems stored under moist conditions for three weeks." "Differenct cacao viruses react differently. The most consistent results are given by the virulent virus 1.A, while less virulent viruses like 1.B and 1.F give a weaker positive reaction. The probably unrelated virus 1.C produces a weak negative reaction, the virus depressing the rate of coloration."

Treatment of Masses Containing Chocolate

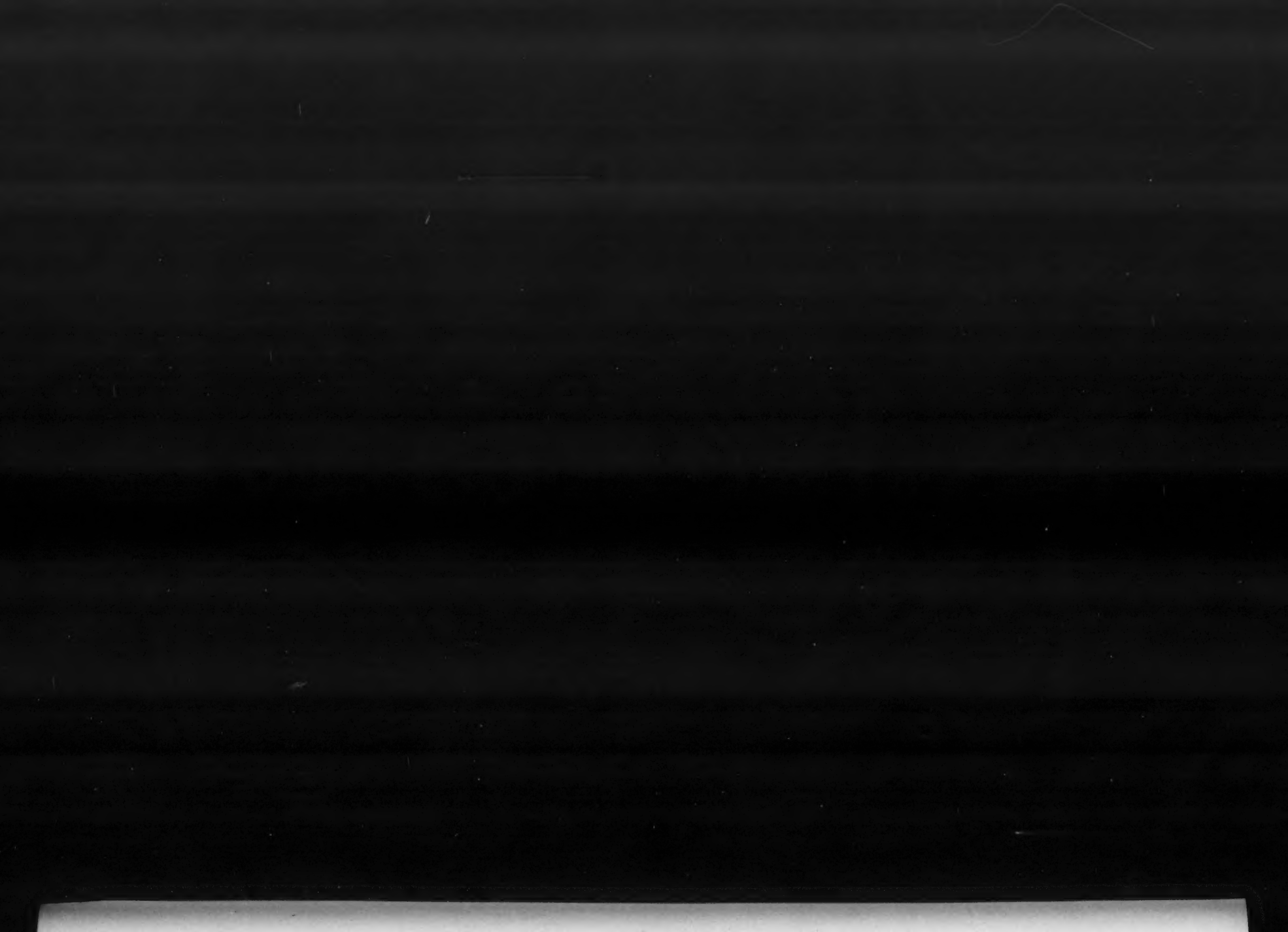
Tore Nordenskjold, of Malmo, and Knut Sixten Holmquist, of Stockholm, Sweden, U. S. Patent 2,496,557. "In a process for the improvement of chocolate masses which includes a conching treatment of such masses, the step which comprises subjecting such masses to the influences of mechanical oscillations with a frequency of at least 15 kilocycles per second."

Sugar Purification Ion Exchange

F. L. Gayles, of Lake Charles, La., assignor, to American Cyanamid Co., New York, U. S. Patent 2,496,244. "A process which comprises passing a raw sugar juice containing ionic impurities through at least one pair of ion exchange materials, the first of each pair being a cation exchanger and the other an anion exchanger, adding about 0.01-0.1 per cent of phosphoric acid calculated on the basis of the available P_2O_5 and based upon the weight of the solids of the juice thereafter adjusting the *pH* by means of lime to about 6-8 and removing the precipitated and coagulated material from the solution."

Effects of Sugar on Oxidation of Ascorbic Acid

M. A. Joslyn and John Miller, Food Research, Vol. 14, *No.* 4 (1949)—The kinetics of the oxidation of ascorbic acid by oxygen in the presence of copper and iron is studied in this work. The rate of oxidation of ascorbic acid, under conditions of limited oxygen concentration and under conditions where oxygen concentration was not limiting, is determined in various buffers and at various *pH* levels, in the presence of varying amounts of cupric and ferric ions and in the presence of two levels of concentration of several sugars. The rate of oxidation of ascorbic acid in phosphate buffers at *pH* 1.5 to 7.5 and in presence of levulose, dextrose, and sucrose at concentrations varying from 10 to 60 per cent was investigated in



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1. ECLIPSE "F"—medium fluidity—for firmer textured jellies.
2. ECLIPSE "G"—high fluidity—for rapid cooking, greater clarity.

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1. Standard—ordinary Corn Starch.
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6. Reduces viscosity in chocolate coatings

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Decatur, Illinois

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solutions supplied with excess oxygen and in solutions containing limited amounts of oxygen.

The Buffer Power of Sugars

C. L. Hinton, International Sugar Journal, Vol. 51. *No.* 608 (1949)—The buffering effect of sugars, due to the presence as impurities of organic acids and their salts, may be an important factor in the manufacture of food products in which sugar is a principal ingredient. The buffer power is conveniently defined as the number of ml. of 0.1 N hydrochloric acid, which must be added to 1,000 ml of a 25 per cent (wt./vol.) aqueous solution of the sugar to bring the *ph to* 4.0; though it is recognized that a single figure cannot give a completely adequate description of the properties of a buffer mixture.

Confection Making Apparatus

Office Gazette, U. S. Patent Office, November 8, 1949. *Henry E. Bianchi, Elmhurst, N. Y., assignor to G. Cella, Inc., New York, N. Y. Granted Patent No.* 2,487,417, *as follows*:

"1. In a confection making apparatus, a pluflat prismatic shape divided lengthwise into secrality of multicavity molds, means for intermittently moving said molds in succession in a horizontal path to spaced apart stations for filling the cavities of each mold, a plurality of carriers for applying closures on the mold cavities, additional means for moving said carriers in succession identical with said movement of the molds part way in opposite direction thereto and in timed relation therewith in upwardly turned and downwardly turned positions, means for depositing material to form said closures on the carriers while the latter are in upwardly turned positions, said carrier moving means extending part way along the path of movement of the mold moving means, and means of pressing the carriers individually while in downwardly turned positions toward the molds and transferring the closure material to cover the mold cavities."

Barcelona, Du Chilly Filberts

Journal of the American Oil Chemists' Society, Vol., 26, *No.* 10 (1949)—An analysis of Barcelona and Du Chilly filbert nuts for their principal constituents is reported in this study. Characteristics of the oils obtained by solvent extraction and by cold expression have been determined and their fatty acid composition ascertained, the report states. "Most of the chemical and physical characteristics of the oils as determined in this laboratory agree well with values previously reported by other investigators on European varieties," the authors state. "However, our study of the oil components shows a considerable difference in fatty acid composition."

Transfer of DDT to Foodstuffs From Impregnated Sacking

D. E. Butterfield, E. A. Parkin, and M. M. Gale, Journal of the Society of the Chemical Industry, Vol. 18, *No.* 11 (1949)—(*A London publication*)—A method is described for determining the amount of DDT in foodstuffs, using monoethanolamine to dehydrochlorinate the DDT,

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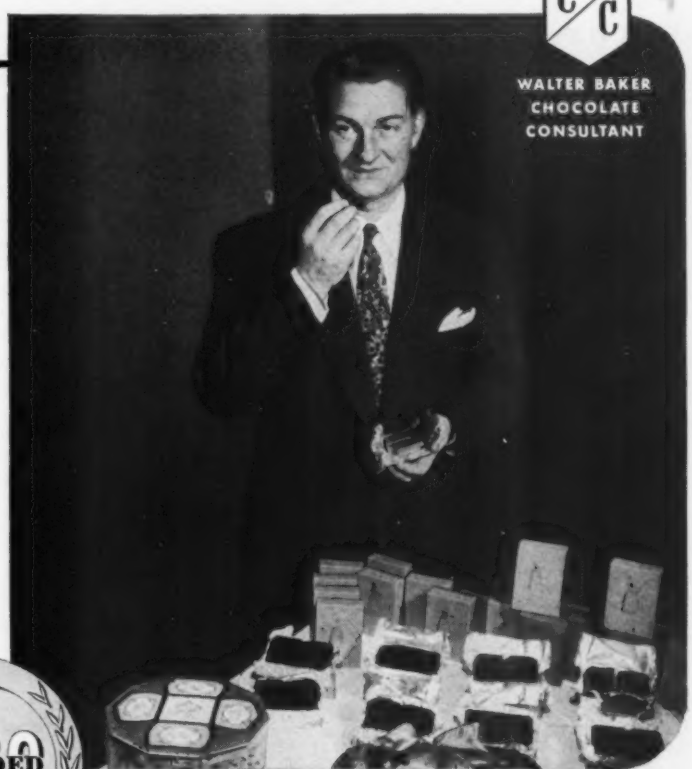

Cliff Phoenix calls your attention to the following . . . from among 30-odd high-grade chocolate coatings and liquors made by Walter Baker for the confectionery industry.

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Eagle, Caracas
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followed by electrometric titration of free chloride with silver nitrate; the monoethanolamine does not hydrolyse the fats and oils. The method has been used to determine the quantities of DDT transferred from DDT-impregnated sacking to cocoa beans, decorticated ground nuts, wheat, wheat flour, and soya flour, report the authors. Relatively large quantities of DDT may be transferred in a few months, the findings indicate, particularly to finely divided and fatty foodstuffs, "and much caution must be exercised in making recommendations for the use of DDT-impregnated sacks to prevent or control insect infestation in stored foodstuffs." The importance of vapour-phase transfer of DDT is discussed, also.

"The limit of tolerance of DDT in foodstuffs for human consumption at present recommended in this country (*the United Kingdom—Ed.*) is a mean concentration of 7 ppm. The general conclusions may, therefore, be drawn from this investigation: (a) that in temperate climates, whole seeds, e.g., wheat and cocoa beans, may safely be stored for at least one year in bags impregnated with up to 1 per cent w/w DDT; whole unprocessed wheat may be similarly stored in bags impregnated with up to 5 per cent w/w DDT; and (b) that finely particulate or broken materials (especially if fatty). e.g., wheat flour, soya flour, and decorticated groundnuts cannot safely be stored for even four months in bags impregnated with 1 per cent w/w DDT."

Book Reviews

Buying and Administering Corporate Insurance

Russell B. Gallagher, 123 pages, 1949.

Reported the "first analysis of corporate insurance management practices," this study is based on a questionnaire survey of 226 representative companies, case studies, and interviews with leading insurance buyers, brokers and carriers. The report covers methods of determining policy on insurance matters, organization of company insurance departments and their position in the corporate structure, and the procedures used in determining day-to-day insurance matters including losses. Other matters covered in the survey include such subjects as coverages which are commonly self-insured, use of retrospective rating plans for workmen's compensation and public liability, placement of coverage with different types of insurer, reports to top management, methods by which losses are adjusted, and reports and periodicals found useful by insurance administrators.

Copies of this report are available from the American Management Ass'n, 330 W. 42nd St., New York 18, N. Y., at $2.50 to AMA members and $3.75 to non-members.

Monetary Management

By E. A. Goldenweiser, 175 pages, 1949, $2.75.

A research report issued by the Committee for Economic Development, Dr. Goldenweiser's book is a brief, readable review of the development of American monetary policy in the 35 years since the Federal Reserve System was established and outlines problems confronting American monetary management. Chapters include: Role of Money in the Economy, Role of Monetary Authorities, Our Monetary Mechanism, Crucial Policy Decisions by the Federal Reserve, Waging War as an Inflationary Process, Postwar Monetary Conditions and Policies, Federal Reserve Powers, International Monetary Factors.

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A Candy Research Report

Calcium Carbonate Tests

IN FURTHER LABORATORY experiments on the use of calcium carbonate of U.S.P. Food Grade as a casting medium, it was found that the difficulties encountered with marshmallows and jellies could be overcome by using mixtures of the carbonate with molding starch, announce the National Confectioners Ass'n and the Dept. of Agriculture in "Report No. 18" on "Progress in Candy Research." The findings, as reported by John Henry, chairman of NCA's research committee, follow:

Impressions made by hand were satisfactory for casting. Experiments were made to determine the proportion of the two ingredients by casting several types of candies in three different mixtures. The mixtures used contained 25 per cent, 50 per cent, and 75 per cent regular molding starch with the balance in each case being heavy grade calcium carbonate. There was little difference in the results in any of the three mixtures, the one containing 75 per cent calcium carbonate and 25 per cent starch being as satisfactory as the one in which these proportions were reversed. Batches of the same composition of a jelly, marshmallow, and cream fondant were each cast in mixtures of all three proportions, and also in a control tray of pure molding starch. All of the candies separated and dusted cleanly from these casting materials. Setting of the marshmallow was as satisfactory in the 75 per cent carbonate mixture as in starch, and both the pectin jelly and marshmallow were tender and of good quality. No difficulty was experienced with the cream fondant, as would be expected from previous success in casting hard creams in pure calcium carbonate.

It remains to be determined whether mixtures containing 25 per cent starch are sufficiently non explosive to eliminate most of the hazard involved in using pure starch. Arrangements have been made by a large candy firm cooperating with manufacturers of the food grade calcium carbonate to have determinations made of the explosion limits of these mixtures by a laboratory qualified to conduct such tests. It also should be determined if the heavy grade carbonate and starch mixtures can be handled satisfactorily and give good impressions in mogul equipment, but the laboratory does not have such equipment or facilities to carry out casting experiments on this scale.

Addition of carbonate to hard candies: Some additional batches of pulled hard candy were made in which 2.5 per cent of the food grade calcium carbonate was incorporated as an ingredient. These experiments were made to obtain information in response to numerous inquiries as to the best manner of incorporating this dry insoluble material in the candy batch. In previous experiments it had been added on the slab just before pulling the batch following the procedure previously developed for incorporating materials such as soya protein and yeast. A plain hard candy was made in which the 2.5 per cent of carbonate was incorporated in three different ways: (1) one batch in which it was added with the other ingredients and carried through the cooking, and the batch spun and cut without pulling; (2) one batch in which the same amount was added with other ingredients and carried through the cooking but which was pulled and spun; and (3) a comparable batch in which the carbonate was not carried through the cooking but was added on the slab prior to pulling. Comparison of the finished candies readily showed that addition on the slab after pouring the batch was the best manner of adding the carbonate to the candy. Both of the batches in which the material had been added at the beginning and cooked with the other ingredients were of poorer color than the batch in which it had not. The hard candy which was not pulled had the poorest color and general appearance.

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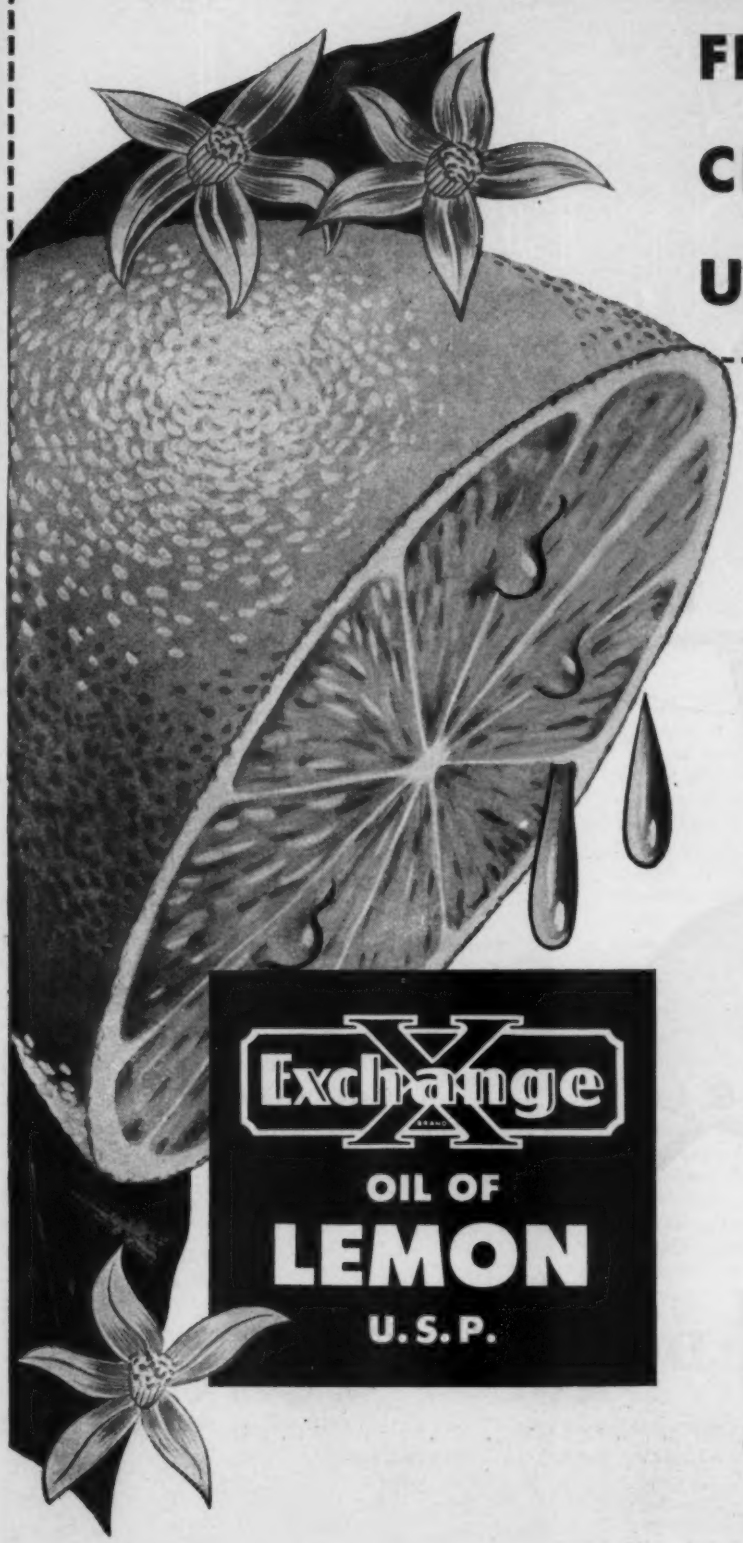

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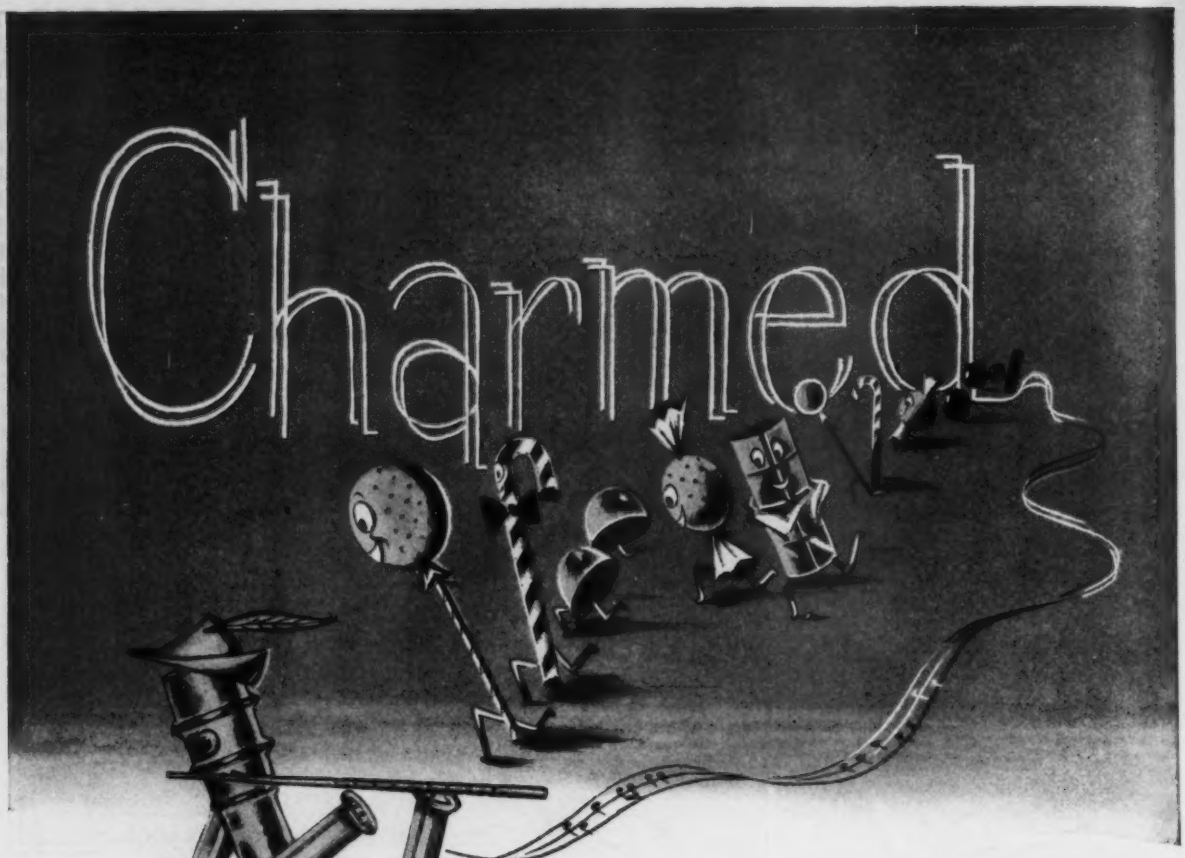

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APRIL, 1950

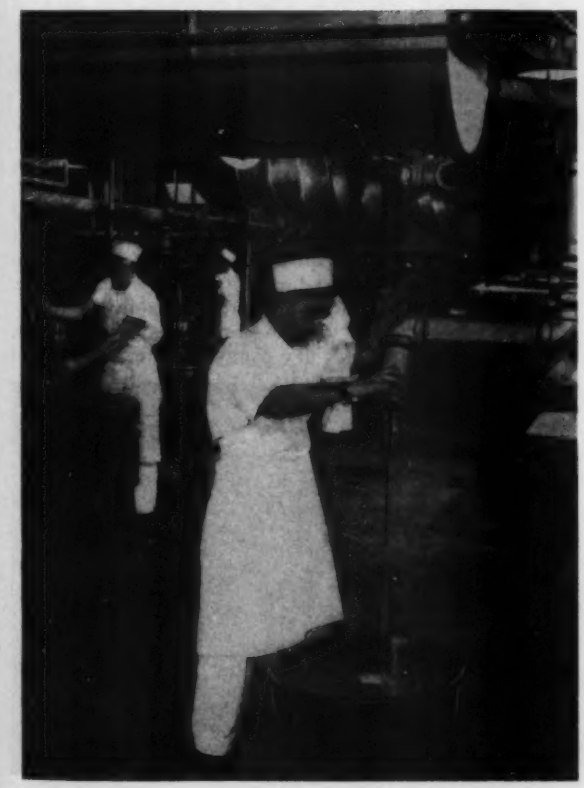
Vol. XXX No. 4

The Manufacturing Confectioner

Corn Syrup Offers Many Advantages in Candy Making

by F. HANLEY BROCK

Food Chemist,
A. E. Staley Manufacturing Co., Decatur, Ill.



Weighing corn syrup for use in making fudge and nougats at Steven Candy Kitchen, Inc., in Chicago. Man stirring kettle contents at left is cooking syrup for "snow caps" (the centers for coconut pieces.)

WHICH WOULD YOU eat the most of—cubes of sugar, or caramels? The candy man's answer is the same as that of his customers: he will take the caramels. The reasons, of course, are that candy is not excessively sweet, and it also has better flavor and texture.

The candy manufacturer knows that there are several factors which should be considered, when he thinks of what the customer wants in candy. He knows that if the candy is too sweet, the customer cannot fully enjoy the taste. He knows, too, that if the taste is better, the customer will consume more, and that if the cost is low that will help increase sales.

Taste Appeal

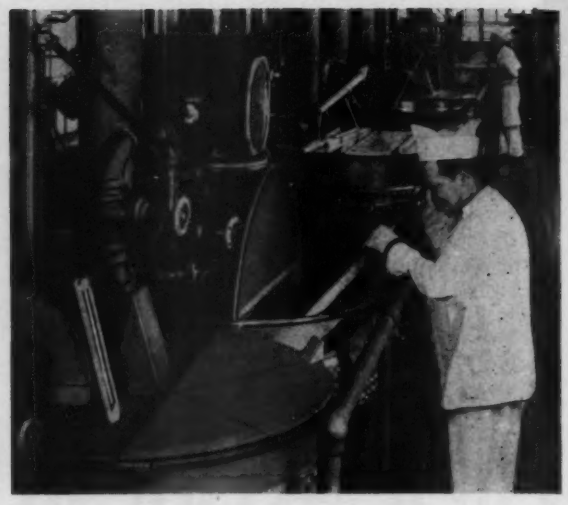
He has learned that candy made with corn syrup appeals to the consumer because of its taste. It has the taste of food. The mental desire for more of it is a logical sequence. Yet it is not excessively sweet. It does not create taste fatigue.

Candies which are not so sweet usually have more sales appeal than similar candies which are sweeter. To achieve this effect, the manufacturer uses corn syrups which are available with different sweetness values, enabling him to control sweetness without affecting the proportions of the ingredients or the food values of the candies. (Confectioners and chewing gum manufacturers used 708,919,901 pounds of corn syrups in 1949.)

Corn syrups—since their introduction in 1880—have been one of the chief ingredients of many candies, particularly jellies, marshmallows, caramels, taffies, nougats, fudges, hard candies, and brittles. Corn syrups produce

IN THIS BATTERY of kettles (right) at E. J. Brach & Sons, Chicago, candy ingredients including corn syrup are cooked and mixed before molding into final shape.

CONSTANT WATCHFULNESS (below) is required in this painstaking operation at E. J. Brach & Sons to make sure that the liquid in these molds is the correct size.



the results desired by the manufacturers and the consumers of these candies. In addition, they are among the lowest cost ingredients used by the manufacturer.

Corn syrups in candy-making have certain fundamental functions.

There are few candies, in fact, in which corn syrup cannot be used advantageously or which do not contain corn syrup.

Technical Functions

Corn syrup in candy-making is a necessity because of its technical functions. They are: (1) preventing or controlling the crystallization of sugar; (2) retaining moisture in the candies; (3) adding body to the candies; (4) controlling sweetness of the products; and (5) supplying wholesome, nutritious, sweet food solids at a minimum cost. The extent to which each of these effects is produced in a candy can be varied by properly adjusting the ratio of corn syrup to the sugar and other ingredients.

The customer likes candy made with corn syrup because of its better eating qualities and better flavor.

The manufacturer likes it for all of the above reasons but especially because using it creates a customer desire for more.

Variations in products are achieved by the candy manufacturer by choosing the type of corn syrup best suited for producing the particular effect desired. Precise control in the manufacture of corn syrup to various specifications makes it possible to achieve uniformity of results in candy-making. Close control over manufacture is exercised by the corn refining industry at every step in the process, insuring a standard product in regard to *density*, *D.E.*, *pH*, *inversion*, and *colors*—terms which are explained in detail further on in this article.

Controlling Crystallization

Crystallization or "grain" in a candy is generally prevented or controlled by the use of a predetermined quantity of corn syrup. Certain candies, such as fudges, fondants, and creams, depend on some crystallization of sugar to produce their characteristic textures. The ratio of corn syrup to sugar in such candies is limited to just that which will retard crystallization to the desired extent. Corn syrups can be used interchangeably for this purpose, for the percentage of reducing sugars in the syrup has little effect on the ability of the syrup to control crystallization of cane or beet sugar. The use of dextrose itself in candies, however, is limited due to its own strong crystallizing tendency.

BATTERY OF STEAM pressure kettles used for cooking "Oh Henry" caramel at Williamson Candy Co., Chicago. Here milk, sugar, corn syrup, vanilla, and salt are cooked to the necessary degree. The caramel is piped by gravity to candy-forming machines on the floor below.

Retaining Moisture

Although one of the purposes of using corn syrup in candy manufacture is to retain moisture, ordinary confectioners' corn syrup is only slightly hygroscopic and, therefore, is the type recommended for use in hard candies, brittles, and other dry candies. Enzyme-converted corn syrup, with its high sugar and low dextrine content, is used in soft candies to retain moisture and prolong keeping qualities. Enzyme-converted corn syrup affords special advantages in soft candies such as jellies, marshmallows, and fudge, which ordinarily dry out with age and exposure.

Adding Body To Candies

Corn syrups are used to impart body and chewiness to candies such as nougats, caramels, and taffies. Although ordinary corn syrups can be used to a limited extent in nougats, marshmallows, and frappes to impart body for good whipping qualities, enzyme-converted corn syrup is especially suited for whipped products because of its low dextrine content and greater fluidity.

Corn syrup can be used to control candy sweetness. The more syrup one uses in a candy, the greater the need

for a sweeter syrup. The extra-sweet enzyme-converted corn syrups bring out sweetness and flavor, even when used in high proportions.

Low Cost Ingredient

Higher quality at lower cost is obtainable by the use of enzyme-converted corn syrup (one ingredient) in place of invert sugar and ordinary corn syrup (two ingredients) in the proper formulas in fudges, fondants, and other soft candies. Commercial corn syrups are wholesome, nutritious foods, supplying on a solids basis about 1809 calories of energy per pound, essentially the same as that of any pure carbohydrate. On a solids basis, corn syrups are priced lower than any other sweetner used by the confectionery industry.

Corn syrups result from the hydrolysis of corn starch, the end result of the process being a chemical breakdown of the starch into a mixture of dextrose, intermediate sugars (maltotriose and maltotetrose), maltose and dextrine.

The extent of conversion in a corn syrup is expressed by a number known as the dextrose equivalent, or D.E., which is an index of the physical qualities of a syrup. At any given concentration, as the D.E. is increased, the syrups are more fluid, sweeter, and more hygroscopic—that is, they hold moisture better.

The D.E. values of commercial corn syrups used widely in the confectionery industry range from about 42 to 63, and the syrups are classed as ordinary conversion, medium conversion, and enzyme-conversion.

Ordinary confectioner's syrup has a D.E. of about 42. Medium conversion corn syrups are available at around 52 D.E., and above. Enzyme-converted corn syrups have a D.E. of about 63.

The approximate composition of representative ordinary, medium and enzyme-converted corn syrups is shown in the accompanying table:

Representative Corn Syrups

	Ordinary Confectioner's Corn Syrup	Medium Conversion	High (Enzyme) Conversion
	42 D. E. 43° Baume	52 D. E. 43° Baume	63 D. E. 43° Baume
Moisture	19.7%	19.0%	18.2%
Total Solids	80.3	81.0	81.8
Dextrose	17.6	25.5	30.6*
Maltose	16.6	20.8	27.9*
Intermediate Sugars	16.2	11.0	13.1
Dextrines	29.6	23.4	9.9
Ash	0.3	0.3	0.3*
pH	4.8 to 5.0	4.8 to 5.0	4.8 to 5.0
Viscosity at 100° F.	150 poises	104 poises	58 poises
Weight per gallon at 100° F	11.8 lbs.	11.8 lbs.	11.8 lbs.

*For high (enzyme) conversion corn syrups refined by an ion exchange process, the contents are different as follows: dextrose 30.8 per cent, maltose 28.0 per cent, ash 0.02 per cent.

Although confectioner's corn syrups of any type are generally uniform in composition and physical properties, control testing of corn syrups, as well as of other ingredients, is sometimes desired by the user. Flavor is an important element but cannot be tested by any instrumental means. Properties on which chemical or physical tests can be made are *density, D.E., pH, inversion,* and *color.*

As the percentage of moisture in a corn syrup is lowered by evaporation or concentration, the *density* of the syrup increases. Density, therefore, is a convenient index of syrup concentration. Most confectioners' corn syrups are marketed at a density of 43° Baume, which is equivalent to a specific gravity of 1.42 at 100° F. or to a weight of 11.8 pounds per gallon. The percentage of moisture in corn syrups of a given density varies slightly with the D.E. and becomes lower as the D.E. is increased. Syrups of the same types but at other Baumes differ only in moistures and solids contents. In the range of 42-45° Baume, an increase of one degree Baume makes an increase of 2 per cent in the solids concentration.

The density of syrups generally is determined by means of Baume spindles or hydrometers but, because corn syrups are so viscous, accurate determinations require

F. Hanley Brock, author of the accompanying article, received his B.A. at the University of Illinois in 1929 and his M. S. at the same institution in 1931, majoring in chemistry for both degrees. He spent another year at Illinois, then three years with Patent Cereals Co., Geneva, N. Y., a dry corn milling company, as assistant chemist.

In 1935 he was hired by Farley Confections, Inc., Chicago, as a chemist, and after 18 months was made superintendent. He joined the Staley organization in 1939 as a food chemist, to develop satisfactory formulas for the use of Staley's enzyme-converted corn syrup, "Sweetose," in the candy trade. He is now senior research chemist in the technical service division of Staley's. His work consists of developing new uses for Staley products in the food field, new products for the food field, or aiding any customer in the use of Staley products in foods.

CHEMIST IN A. E. Staley Manufacturing Company's process control laboratory at Decatur, Ill., making a corn syrup candy test for inversion and color.

that readings be made at an elevated temperature and then corrected to the 100° F. base. For control testing, density is more easily determined by means of refractometer readings. Refractive index—dry substance tables (see notes 1 and 2 at end of article) and Baume—D.E.—dry substance tables (see notes 3 and 4) for corn syrups are available and by their use the moisture content and the Baume can be accurately calculated from the refractive index and the D.E. values.

Determining D.E.

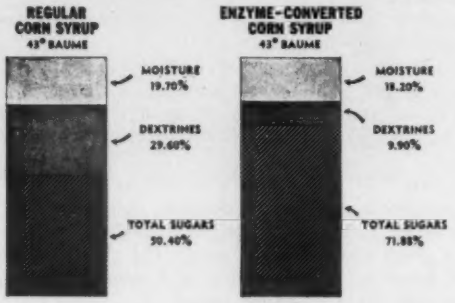
The *D.E.* of corn syrups is easily determined by a titration method (see note 5) with Fehling's solution. Depending on the catalyst used in the conversion, the percentages of dextrose, intermediate sugars, maltose and dextrins in a corn syrup are fixed by the D.E. and the density. Tables and charts are available (see note 6) from which the percentages of each of these constituents can be calculated from the D.E. and dry substance readings. For syrups at the same D.E. and same density converted by different catalysts, such as by acid, or by acid and enzyme catalysts, the ratio of the constituent sugars are different.

The term *pH* is a way of expressing degree of acidity. The *pH* value of a corn syrup is easily determined by means of an ordinary *pH* meter. Uniform *pH* values in syrups are important because of the effects of *pH* on sugar inversion and on the color development.

By the *inversion* or inversion factor of a corn syrup we mean the percentage of sugar (sucrose) that is inverted when a mixture of the syrup with sugar and water is cooked under specified conditions in a "candy test." The inversion factor depends on the *pH* of the syrup and on the degree to which this *pH* is stabilized by buffering materials in the syrup. To produce more uniform candies and especially to produce hard candies, the inversion factor of a corn syrup should be as low as possible. "Candy tests" are also useful for determining color stability in corn syrups. The same "candy" samples can be tested for both inversion and color.

Color Judging

Color in a corn syrup can be judged roughly without laboratory tests but can be determined accurately by means of a colorimeter. Besides original color, the color of the syrup after heating under specified conditions is important for some corn syrups are more stable than others to discoloration from heat. Color in a corn syrup increases with age or upon heating, at a rate which depends largely on the temperature, the *pH* value, and the degree to which traces of minerals and proteins were removed from the syrup during the process of its manufacture. Color development is generally much more rapid at higher temperatures. It is, therefore, desirable to keep the syrup storage temperature as low as practical and the candy cooking time as short as possible to prevent excessive darkening of the syrup and of the candy.



References

1.—Commercial Table of Refractive Indices of Corn Syrups and Corn Sugar Syrups at 45° C., Methods of Analysis of the A.O.A.C., Sixth Edition, page 591.

2.—Refractive Index—Dry Substance Tables for Starch Conversion Products, Cleland, J. E. Evans, J. W., and Fetzer, W. R., Ind. and Eng. Chem., Anal. Ed., 16, page 161 (1944).

3.—Commercial Table for Dry Substance in Corn Syrup and Corn Sugar Syrup, Methods of Analysis of the A.O.A.C., Sixth Edition, page 391.

4.—Baume—Dextrose Equivalent Dry Substance Tables for Corn Syrup and Corn Sugar, Fauzer, E. E. Cleland, J. E., and Fetzer, W. R., Ind. and Eng. Chem., Anal., Ed. 15, page 199 (1943).

5.—Lane-Eynon General Volumetric Method, Methods of Analysis of the A.O.A.C., Sixth Edition, page 591, sect. 34.148.

6.—Reports on the Composition of Acid Converted and Acid-Enzyme Converted Corn Syrups by the Sub-Committee on the Analysis of Corn Syrups of the Corn Industries Research Foundation.

NCA Council on Candy Meets in New York

DESPITE ECONOMIC PRESSURE, there is little chance of a trend away from 5-cent candy bars, V. H. Gies, vice-president of Mars, Inc., stated at a meeting of the Council on Candy of the National Confectioners' Ass'n last month in New York's Statler Hotel "to discuss problems within the industry."

"Although many industry members might think such a move justified," he said, "I do not think the public can expect any general trend away from 5-cent bars toward 10-cent bars in the immediate future."

Mr. Gies emphasized that increasing the price of candy bars is not the solution to narrowing profits in production. Over a period of many years, the public has become used to paying 5 cents for gum and candy bars, he added, and it would take a great amount of education to change this.

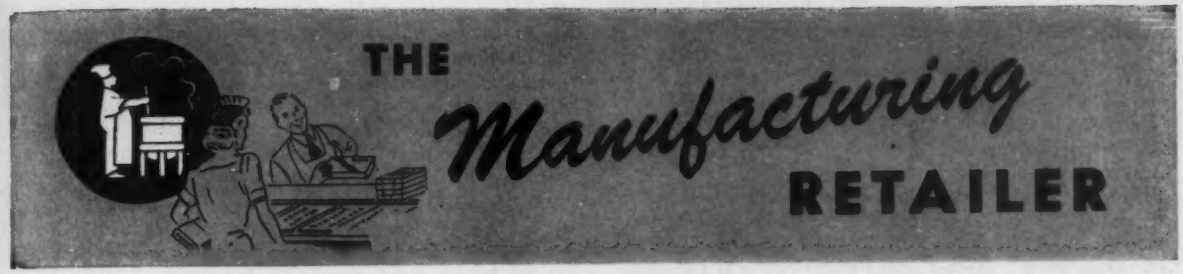
Paul M. Beich, president of the Paul F. Beich Co., Bloomington, Ill., declared that the way to get more volume is thorough keeping up quality.

"Conditions have grown increasingly competitive," he pointed out. "The only possible way to increase sales is by maintaining the highest quality standards. Producers who fail to do so will soon see their sales fading."

There have been reports in the trade that various large jobbers have been pressuring producers to ease prices. It has been pointed out that such a move could only result in cutting quality and thereby injuring the industry as a whole.

Theodore Stempfel, vice-president of E. J. Brach & Sons, said that material costs have tripled since 1940, but despite this the public is now getting its greatest value in the industry's history.

Irvin C. Shaffer, secretary of Just Born, of Bethlehem, Penna., who was recently named general chairman for the 67th annual NCA convention in June, said that because of the current situation the need for more modern machinery will be stressed at the convention, with emphasis on its sanitation character.



How to Make Pralines

by **WALTER L. RICHMOND**

PECAN PRALINES are just as Southern in style as the Mardi Gras held yearly in New Orleans. Although Southern in style, however, the delicate flavor they carry has given them a taste appeal that has created a demand for them throughout the entire U. S. Each year more of these delicious confections is being sold, especially by the manufacturing retailer, and a large amount is also being sold through jobbers. This type of merchandise carries the delicate flavor so characteristic of the item but must be cooked to a high enough degree to withstand shipping and at the same time keep breakage to a minimum. This article will be confined to the type of praline *made and sold on the premises.* If, however, you have more than one store in your city and decide on this type praline, breakage will be kept at a low figure if the goods are delivered by truck.

Varities of Pralines

There are several varieties of pralines, and they contain some or all of the following ingredients: Pecans, white sugar, brown sugar, butter, milk, salt, corn syrup, maple syrup, or maple flavor.

The praline syrup contains a small percentage of noncrystalline syrups such as corn syrup, invert sugar, or maple syrup. The tenderness of the piece is governed by the amounts of noncrystalline syrups used and the temperature to which the batch is cooked.

The grainy body is started by stirring until a grain is developed and a cloudy look appears in the batch. This small amount of grain acts as a seed, and the pralines should be deposited at once. Continued stirring will cause the batch to develop too much of a grainy body, and the pralines will become too sugary in looks and taste.

After the pralines are deposited, the sugar crystals continue to form and, as the candy cools, this crystalline action stops.

While this grain forming action is taking place, in the deposited pralines, some of the sugar crystals that have formed gather in clusters. This accounts for the white spots that appear in the pralines. These white clusters are harder in structure than is the clearer part of the praline. They can be softened to a certain extent by the addition of about one ounce of glycerine to every eight or 10 pounds of syrup used. The glycerine should not be added to the batch until the correct amount of crystal has been formed in the batch in the kettle.

It is a known fact that heat and agitation hasten the forming of the crystals in a batch of candy. Therefore, it is best to let the cooked syrup cool for a short while before stirring, if a minimum of sugar clusters are to be formed.

The cooking temperature for your locality will have to be determined by the trial method. For a tender praline, temperature as low as 236 degrees has been used, but a temperature between 238 to 244 degrees has also been used with good results. Larger amounts of noncrystalline syrups used call for a higher cooking temperature.

The adding of the nuts and the manner of depositing the pralines varies. Some candy makers add all the nuts to the batch after the proper grain has been formed. A given amount of syrup and nuts is then dipped out of the kettle and poured on sheets of tin that have been oiled with slab dressing.

Another method is to deposit the pralines on trays that have been lined with heavy white waxed paper that has been previously oiled with slab oil.

Another method of adding the nuts is to place the determined amount of nuts for one praline into the syrup and dip them and the amount of syrup needed for one praline out of the kettle and pour onto oiled tins or waxed paper.

Still another method of making the pralines is to place metal rings onto the tins or papers. Place the amount of nuts desired into each ring and deposit the syrup into the rings. The syrup can be deposited by funnel, dipper, or mechanical depositor.

Following are formulas for different types of pralines. The formulas are for small batches, but larger batches to fit your needs can be made.

Praline Formula No. 1—Very Tender

6 lbs. white sugar
2 lbs. light brown sugar No. 8 or 10
water to dissolve
½ lbs. corn syrup

Cook to 238 degrees. Set off of fire and cool to approximately 170 degrees. Stir and rub paddle on side of kettle until batch is cloudy looking.

Add only enough imitation maple flavor to give the batch a faint trace of maple.

⅛ oz. fine salt
2 oz. dairy butter

Add nuts and deposit by using one of the method-

described above. When pralines have set up and cooled, they should be packed into glassine envelopes.

Praline Formula No. 2

10 lbs. white sugar
1 lb. maple syrup
½ lb. corn syrup
water to dissolve

Bring to boil and add 1 lb. sweetened condensed milk.

Cook to 238 or 240 degrees. Set off of fire and cool to approximately 170 degrees. Add small amount of imitation maple flavor. *Do not over-flavor.* Stir and rub paddle on side of kettle until batch becomes cloudy looking. Add nuts and deposit at once using one of the methods described above.

Praline Formula No. 3

6 lbs. white sugar
2 lbs. light brown sugar No. 8 or 10
2 lbs. corn syrup
water to dissolve

Cook to 242-244 degrees. Set off of fire. Let cool for about 5 minutes.

Add 4 oz. dairy butter. ⅛ oz. fine salt. Enough imitation maple flavor to give batch a faint trace of maple.

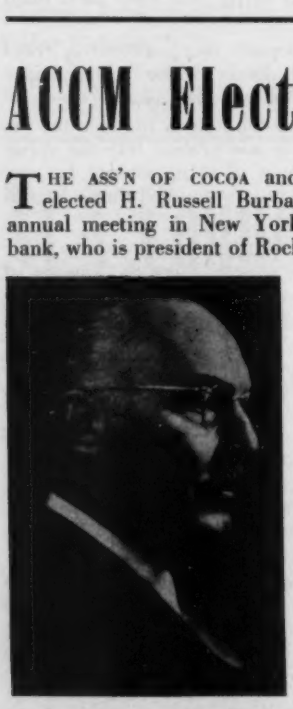
Add nuts and deposit at once using one of the methods described above.

These three formulas can be used as a basis for different combinations of ingredients to produce a praline to suit your individual requirements. Different combinations of the ingredients will produce pralines with a different flavor and eating quality.

Maple sugar can be used to replace brown sugar and the imitation maple omitted. It is important that the batch should not be over-flavored. The ingredients should be so blended that you can recognize the fact that brown or maple sugar as well as butter, cream or milk, and salt have been used to produce the characteristic taste of pralines.

ACCM Elects Burbank

THE ASS'N OF COCOA and Chocolate Manufacturers elected H. Russell Burbank president at its March annual meeting in New York's Statler Hotel. Mr. Burbank, who is president of Rockwood & Co., succeeds Clive



H. RUSSELL BURBANK, left, is named president of the Ass'n of Cocoa and Chocolate Manufacturers and chairman of the American Cocoa Research Institute. Clive C. Day is named ACCM vice-president and vice-chairman of the Institute. Mr. Burbank is president of Rockwood & Co., and Mr. Day is president of Peter Cailler Kohler Swiss Chocolate Co., Inc.

C. Day, who was president for the past three years. Mr. Day, president of Peter Giller Kohler Swiss Chocolate Co., Inc., is elected vice-president, and asked that he not again be considered for the presidency. Miss Gretchen Schoenleber, president of Ambrosia Chocolate Co., is named a new member of the executive committee. August Merckens, president of Merckens Chocolate Co., Inc., is the retiring member of the executive committee, Gordon Pickett Peyton, of Washington, D.C., is retained as secretary-treasurer and general counsel.

Mr. Burbank predicted that competition would continue to increase this year in the industry. He declined to make an estimate of industry volume for 1950, adding that this would be governed mainly by the trend of cocoa bean prices.

Regardless of high material and operational costs, the price of five-cent chocolate bars will not be increased, he said. He explained, however, that he was speaking only for chocolate bars and not about candy-filled chocolate bars.

In stepping down from the presidency, Mr. Day declared that the most outstanding accomplishment by the association since 1947 was organization of the American Cocoa Research Institute and establishment of the Cacao Center at Turrialba, Costa Rica.

The sugar quota for 1950 is proving far too low at the current rate of consumption, and efforts are being made to raise it, said Mr. Peyton.

In explaining the current sugar supply situation, Mr. Peyton said that to date consumption was running ahead of the quota. Last December, Secretary of Agriculture Charles F. Brannan raised the quota 250,000 tons to the present 7,500,000 tons of raw sugar for this country in 1950. This controls shipments from various areas of supply and also has an effect on sugar prices.

"We are making every effort to obtain an upward revision of the present quota and will attend a meeting with Dept. of Agriculture officials for that purpose in Washington later this month," he asserted. "Our primary concern is supplies and not prices, however."

Leonard Schwartz, director of research of the American Cocoa Research Institute, who has just returned from an extended tour of cocoa production areas in West Africa, made a report to the meeting.

Discussions also included: (1) trade practice rules pending before the Federal Trade Commission, (2) the proposed reopening of Food and Drug Administration Standards of Identity for Cocoa and Chocolate products, (3) setting of minimum wages for the industry, (4) administration of the sugar act of 1948, (5) administrative and legislative activity affecting tree nuts and peanuts, and (6) the work of the American Cocoa Research Institute.

Mr. Burbank was also named chairman of the American Cocoa Research Institute, at the annual meeting of its board of directors in New York. He succeeds Clive C. Day, who becomes vice-chairman.

The board of directors chosen includes: Mr. Burbank; Mr. Day; James L. Clevenger, Jr., Hershey Chocolate Corp.; George Schutte, president of the New York Cocoa Exchange; and Timothy J. Mahoney, president of the Cocoa Merchants Ass'n. Leonard Schwarz was retained as director of the Institute and Gordon Pickett Peyton as secretary-treasurer and general counsel.

Mr. Burbank announced continuance of the work of the Institute with renewed vigor and that the Cocoa Research Institute has joined with the Institute of Inter-American Sciences at Turrialba, Costa Rica, in development of the Cacao Center, which now has 20 students studying scientific advancement of cocoa bean production. Ralph H. Alle, director of the Institute of Inter-American Sciences, and Mr. Schwarz made a report to the meeting.

plant sanitation and housekeeping

by **J. LLOYD BARRON**
Sanitary Engineer and Manager, Sanitation Dept.
National Biscuit Co., New York

THE DIRTY INDUSTRIAL plant is, in almost every instance, inefficient. Clutter and disorder go with carelessness and indifferent workmanship. A soiled and messy environment for workers depresses morale, and contributes to absenteeism, labor turnover, and lowered production. Management that tolerates shiftless plant housekeeping may be suspected of taking the short view of production economy and quality.

The above statements will be accepted by any person acquainted with factory operation as substantially true. Certainly, no one can argue for them in the reverse. If they are rational, to what extent, then, has management recognized sanitation as desirable and porfitable, and how far should it go in putting money and effort into plant sanitation? Obviously, industrial sanitation has too many intangibles to be subjected to an arbitrarily convincing cost analysis. Even though some aspects of plant sanitation maintenance can show definite dollar savings, it requires more than a cost accountant to evaluate a sanitation program.

Management has to exhibit a degree of economic statesmanship in giving support to an adequate system of sanitation and good housekeeping. This statesmanship is usually compounded of pride in the quality of products, of responsibility to its employees and to the public, and of hard-headed business sense. *In the food industries, there will also be the major stimulus of wholesome respect for the police power and regulations of local, state, and federal agencies. In fact, with this outside impetus, food industries have gone far ahead of industry generally in developing high levels of plant sanitation.*

Aside from the avoidance of trouble with food regulatory agencies, managements of food factories have found that the conscientious and intelligent maintenance of sanitation has contributed substantially to the validity of quality claims regarding their products. Since quality in food cannot be dissociated from the cleanliness of ingredients, and their processing, packaging, and storage, *genuine sanitation is an essential feature of the value of a food product, without which it cannot have long-time public acceptance.* While admitting that the sanitation factor cannot be precisely evaluated in the finished product, the smart manufacturer puts it in, and thereby reduces the worries, the wastage, and the ultimate failure that go with a dirty plant and product.

Another industry-wide influence for sanitation is that of organized labor. In earlier days, regulations of working conditions by governmental agencies had some effect in establishing a rather low minimum of plant sanitary facilities, and there were intensive attacks on some of the more obvious and lethal of industrial hazards. However, organized labor in its earlier stages was concerned principally with the struggle to raise wages and reduce hours, and only incidentally with working conditions and conveniences. The gains that have been made have come as much from enlightened management as from labor pressure. But, as wage scales level off and the battle for pensions waxes and wanes, it can be expected that labor's representatives will give increasing attention to those aspects of industrial sanitation which contribute to employee comfort and morale.

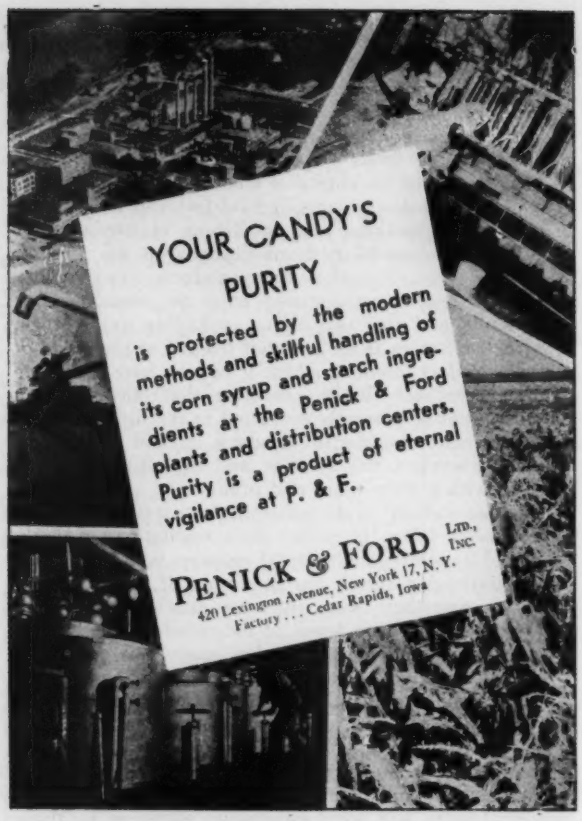
The Working Environment

What is plant sanitation? In the minds of those professionally concerned, it is not restricted to cleaning routines, toilet maintenance and wast removal, but includes the total environment of the worker on his job. It, therefore, comprises the suitability of the structure, the adequacy of lighting, the temperature and purity of the atmosphere, the comfort and cleanliness of dressing and sanitary conveniences, the safety and quality of water and food supplies, the suppression of noises, the proper disposal of wastes, the facilities for on-the-job rest and relaxation, and the prevention or abatement of toxic and hazardous working conditions.

The beneficial development and maintenance of this total environment requires: (1) a policy determination and acceptance of cost obligations by management, (2)

the author

J. LLOYD BARRON, *the writer of this article, became sanitary engineer of National Biscuit Co., New York, in 1945, and set up a sanitation department and a program of food and industrial sanitation for 60 factories and 240 food warehouses. He is a graduate in liberal arts and civil engineering at the University of Kansas, where he received his C.E., and was for six years assistant professor of sanitary engineering at Kansas University. He has served both Kansas and New York state health departments as a sanitary engineer. He participated in establishment of the Westchester County (N.Y.) Department of Health and directed its division of sanitation for eight years. A similar job was done for Nassau County (N.Y.), where he was county sanitary engineer for seven years. He is a fellow of the American Public Health Ass'n and was one of the founders of the Conference of Municipal Public Health Engineers. Mr. Barron's article is condensed from his paper on "Industrial Plant Sanitation and Housekeeping" presented before the recent Conference on Plant Maintenance, in Cleveland, sponsored by the American Society of Mechanical Engineers and the Society for the Advancement of Management.*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provision of competent management personnel at a high enough level to have authority as well as responsibility, (3) the employment, training, and supervision of adequate personnel for sanitary maintenance, and (4) the furnishing of equipment and materials for sanitation as well as the basic facilities and structures requires for a safe and comfortable working space.

Management Problem

Sanitation is essentially a problem in management. Some degree of plant housekeeping is a necessity; but whether it constitutes a satisfying asset or merely minimizes a liability, depends on management committing itself to the planning and standards it is likely to give other aspects of production. In most large industrial plants, some functions affecting the working environment may be well developed, such as mechanical and structural maintenance, a safety and first aid program, feeding facilities, and departmental cleaning. The maintenance of sanitation is most likely to break down in the general housekeeping, the care of toilet and locker facilities, pest control, waste disposal, and supervision of cleaning labor. In food, drug and cosmetic plants where the sanitation problem is magnified, there is usually continuous pressure to provide supervision, personnel, and facilities for these purposes.

The management problem is to place both responsibility and authority in the hands of a capable person. It must be his primary job. He must be allowed to work at it full time. He must be directly under the top plant executive; he must not be subordinate to a mechanical maintenance foreman, a production superintendent, a warehouse foreman, a personnel director, or an office manager. If any of these latter arrangements prevail, the sanitation program is bound to break down in important details, languishing for lack of direct executive interest and financial support, and playing second fiddle to other activities.

A capable director of the plant sanitation program will prove to be a key person in any plant organization, by relieving the manager of the loose-end jobs related to maintenance, by giving supervision to labor that may otherwise be left to shift for itself, and by working out orderly and labor-saving procedures including the selection and use of equipment and materials. In a food plant, a suitable title is "Sanitation Foreman"; in other types of factories, the title of "Maintenance Foreman" may be more appropriate. In either case, many or all of the following duties may be assigned to him:

1.—Supervision of cleaning and maintenance personnel, other than mechanical and those assigned to departmental foremen.
2.—Supervision of toilet and dressing room facilities.
3.—Cleaning of general areas, including offices,

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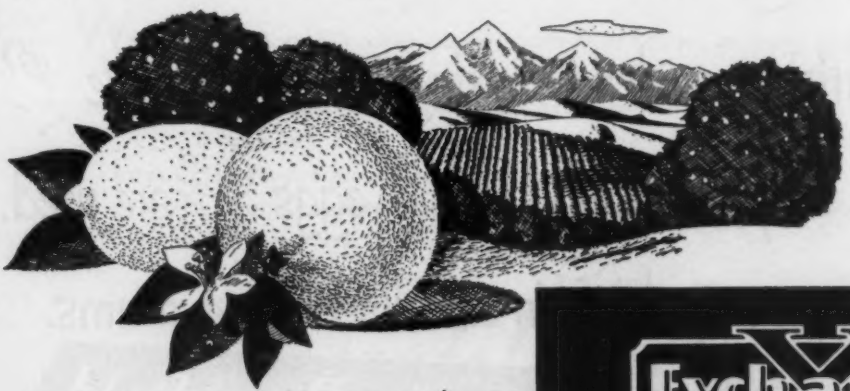

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halls and stairways, warehouse space, and outside premises and lawns.

4.—Floor and wall maintenance.
5.—Painting.
6.—Window washing.
7.—Supervision of guards, watchmen, and elevator operators.
8.—Handling of uniforms and laundry.
9.—Control of sundries and sanitation stocks and issuance of supplies.
10.—Rodent and insect control.
11.—Collection, salvage, and disposal of wastes and refuse.
12.—Supervision of industrial washing operations.
13.—Participation in the plant safety program.
14.—Continuous sanitary inspection of the plant, including food service facilities.

This adds up to a considerable job, requiring abilities of the first order not only in management but in knowledge of a wide variety of specific techniques, and general familiarity with the plant and its processes. Where the plant is large or operating with multiple shifts and where important cleaning and maintenance must be done during the night or in non-operating periods, the Sanitation or Maintenance Foreman will require one or more capable assistants, to provide relief supervision and to take over in vacations and emergencies.

Desk, file, and storage spaces are essential for such a foreman. Personnel work-time and job records, inventory records, company memoranda, catalogues, trade magazines, technical and commerical bulletins, text books, etc., must be properly accommodated in accessible order. Sundries stocks, and sanitation materials and equipment should be housed in a locked room, preferably near the Maintenance Foreman's office or combined with it, and strategically located in the plant to minimize travel.

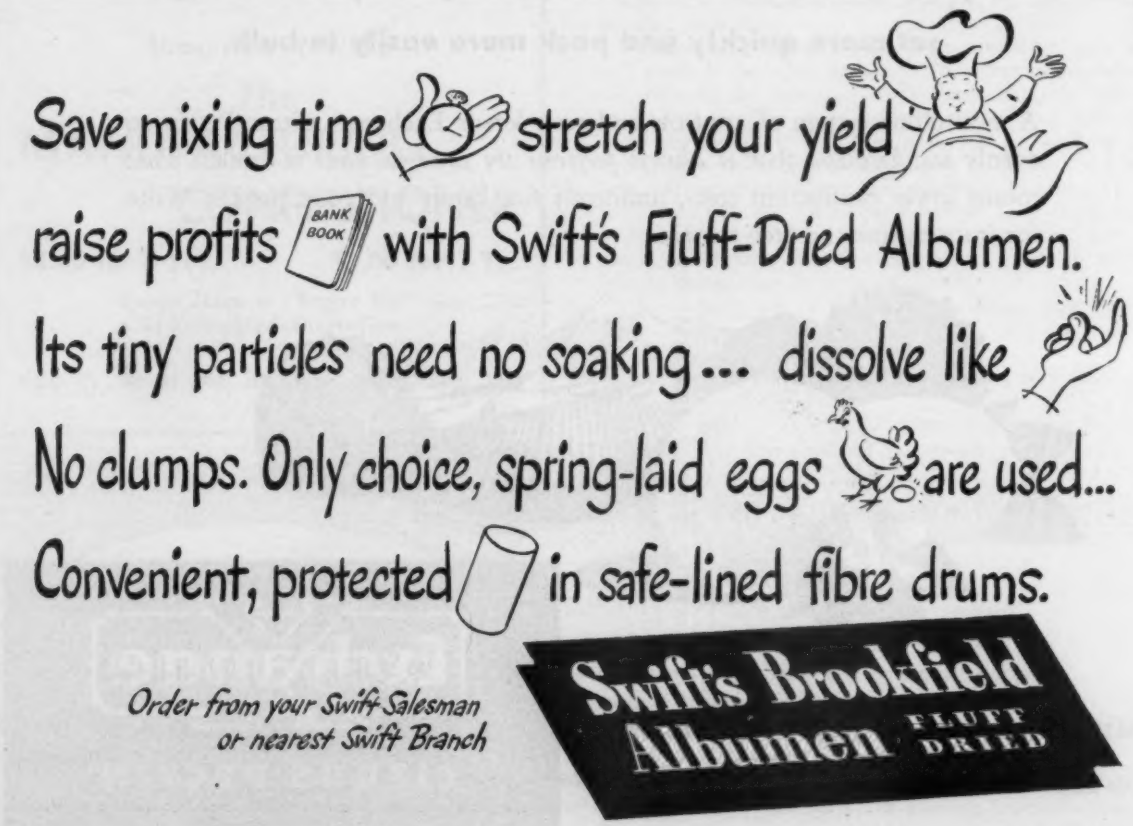
Personnel

There are several sure ways to waste money and to destroy efficiency in sanitary maintenance. One is to put employees on cleaning jobs without supervision. A second is to use the cleaning crew as a labor pool for other departments. A third is to let it be a retreat for the incompetents, the physically disabled, and the pensioners from other departments. It is unnecessary to belabor the point that employees won't work effectively without direction and task assignments. The good Maintenance Foreman will soon protect his men against the encroachments of other departments for relief labor; he will likewise show up the gross wastefulness of trying to carry on such work with a number of mentally and physically infirm cast-offs from other departments.

Wage rates are now too high to permit coolie labor gangs or crude cleaning operations. One well-trained employee with a machine can replace many unskilled laborers, and it is the Foreman's duty to keep posted on improvements in materials and labor-saving devices, to evaluate them in terms of his own requirements, and to sell them to management when they will do a better or a cheaper job.

A Maintenance Foreman will find it advantageous to develop specialties among his men so that jobs requiring extra skill or special knowledge will be done more dependably by the man showing aptitude. In this category are such jobs as operation of floor maintenance machines, industrial vacuum cleaners, painting, and pest control.

Among the specific problems concerning the Maintenance Foreman, floor cleaning and maintenance are the major jobs. Thanks to gravity, almost all of the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soil from production, from employees, and carried in by air from the outside is deposited on the floor where it is augmented by the dust from the wear of the floor itself. The removal of this soil and the conditioning of the floor surface require more labor and more persistent attention than any other sanitation task and is one in which a number of mechanical devices can be used advantageously.

The suppression and removal of dust from working spaces is more than just a housekeeping problem. Dust damages the product in many instances, causes wear of machinery, impairs the health of workers, and may be explosive. The removal of dust, vapors, and odors incidental to industrial processes and at the point of their production for the direct protection of the workers is a mechanical function and part of an industrial hygiene program. The Maintenance Foreman has the rest of the problem in office and plant.

Studies of the use of glycol vapors for the control of air-borne infections have indicated the part played by air-borne dust particles in carrying pathogenic bacteria to susceptible persons. These investigations have made clear that dust in the air around workers contributes to illness and absenteeism. While it is not yet adequately determined how effective glycol vapors may be in reducing infections where humidities are low, and in significantly affecting the occurrence of respiratory illnesses in employees where only the daily working environment has such protection, there is no question about the necessity of eliminating dust from the air, the floor, and other surfaces in the working environment.

The use of air conditioning with filters for dust extraction aids considerably in the suppression of dust but is still limited chiefly to offices. The traditional dry and

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wet methods of floor cleaning by sweeping and by mopping are not in themselves always adequate when the significance of dust is fully realized. Sweeping throws much dust back into suspension and mopping accomplishes only partial removal of soil, the residue of which upon drying, can again be dispersed into the plant air.

Vacuum Cleaning

As in dust collection by air intake ducts at the point of production, vacuum cleaning is the most effective means of dust removal from floors. Whether is is a complete vacuum piping system, one or more portable units or the vacuum on a floor polisher or a power sweeper, this process is instantaneous, highly efficient, and economical. In flour mills with which the writer is concerned, complete piping systems have been installed by which not only are floors routinely cleaned but machinery is periodically cleared of all dust. This equipment has reduced labor, permitted far more frequent cleaning because of its quick functioning in shut-down periods, and literally changed the atmosphere as well as the appearance of the mills. In large bakeries now being constructed, fixed systems and central vacuum exhausters and dust separators are being installed in the area of the plant in which dusty ingredients are stored, assembled, mixed, and processed for the ovens, with portable units of varying sizes and capacities used in the remaining portions of the plants. In a plant of Bethlehem Steel, it is reported that a troublesome problem of removal of metal cuttings at machines was simply solved when three porters were equipped with small domestic, tank-type vacuum cleaners by which coarse and fine particles were quickly and cleanly removed. When dusts have any value, vacuum cleaning permits concentration for recovery and, on fixed systems, local separators may be installed for the segregation of dust or wastes in particular areas.

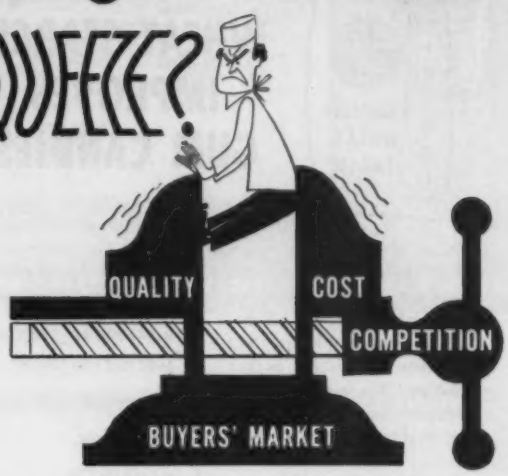
Power Sweeping, Suction

On concrete and wood block floors, vacuum cleaning is particularly effective, since fine dust cannot otherwise be removed from pits and cracks by sweeping. Where there are large expanses of floor space requiring frequent cleaning, the latest development is power sweeping combined with a mild vacuum suction. Large warehouse and garage areas, and extensive aisles in production areas can be expeditioiusly cleaned and a far greater removal of dust accomplished than by any other means except the relatively slower vacuuming by hand tools. The economies of power sweeping are readily demonstrated and the elimination of one employee justifies its use. In cleaning aisles, one or more employees with brooms can move soil and debris from around equipment and from adjacent but inaccessible spaces into the path of the sweeper. A contractor constructing a large bakery recently estimated a savings of $2000 between completion of a large concrete floor and the end of the building job.

At the University of Minnesota, the cleaning time for three acres of garage space was reduced from 160 hours per week to 10 hours, and the cleaning crew reduced from eight men to one. In addition, as is always the case, cleaning is much more thorough, atmospheric conditions are improved, and adjacent areas protected against soil—air-borne and tracked in.

Another aspect of dust suppression is the treatment of wood floor surfaces to reduce wear and to improve cleanability and appearance. This involves sanding to a smooth surface, applying a filler and sealer, buffing, and repeating the sealing and buffing. The floor is thereafter maintained by the same machine by buffing with

caught in this SQUEEZE?



How Aromanilla helps confectioners solve the perplexing problem of keeping quality up and cost down can be told in the words of the confectioners themselves:

NATIONAL CANDY BAR MANUFACTURER: "As soon as the retail shelves began piling up we knew we had to increase the quality of our bar or lose business to competition. Naturally, we tested a lot of flavorings and Aromanilla filled the bill. It gives our bar the full flavoring effect of an expensive standard vanilla at a cost that approximates what we were paying for the vanillin we used before."

CHOCOLATE COATING MANUFACTURER: "We expect to save upwards of $35,000.00 a year, now that we've changed to Aromanilla. Besides giving our coating a flavoring that's equal to, and in some cases, better than, the expensive standard vanilla we used before, we find in Aromanilla one of the most flexible flavors we've ever used. We can get anything from a delicate bouquet to a really full flavor with it. Being able to call your shots on just the right amount of flavor is a definite sales asset in meeting the flavoring requirements of candy manufacturers in different parts of the country."

MANUFACTURER OF $3.00 PER LB. CANDY: "Our customers demand top quality for the price they pay. We *have* to use the best ingredients. Naturally, we are looking for ways to save money, and since our tests prove that Aromanilla can equal, and in some pieces, better the taste effect of our expensive extract, we gladly changed over to it."

Aromanilla fills the need for an economical flavoring which will withstand commercial processing and at the same time impart the full-balanced flavor of the vanilla bean to the finished product with dependable, uniform results. It does it by a special process in which the highly volatile solids of the Mexican vanilla bean—which are usually lost in food processing—are deliberately dissipated and replaced with identical but sturdier solids from other natural sources.

Why not take a tip from these successful confectioners. Order a trial supply. Test it against the finest standard vanilla you can buy. If Aromanilla doesn't do everything that's promised, ship us the unused portion collect and the full purchase price will be refunded.

Aromanilla

TRADE MARK REG. U.S. PAT. OFF.

Imitation Vanilla Flavor

HELPING CUSTOMERS IMPROVE THE TASTE OF THEIR PRODUCTS SINCE 1901

it's the sweet truth!

WHEAT STARCH IMPROVES GUM CANDIES

It's no empty advertising claim that General Mills New Modified B-24 Wheat Starch improves gum candies. Its freedom from cereal taste or odor prevents flavor masking, permits ingredient savings. Higher water absorption and retention capacity keep your gum candies looking better —*longer!* We recommend a 55 degree fluidity (thin-boiling) in dust-free crystalline form.

For complete information about B-24 Wheat Starch for gum candies, write or wire—

B-24 WHEAT STARCH gives your gum candies:

- Exceptional tenderness.
- High clarity.
- Long shelf life.
- No masking of flavors.

General Mills, Inc.
Special Commodities Division

400 2nd Ave. So. Minneapolis 1, Minn. | 208 So. LaSalle St. Chicago 4, Ill. | Room 906, 80 Broad St. New York City 4

steel wool and using a vacuum attachment for dust collection. This is especially effective on hard wood floors and, where sticky soils are not involved, eliminates wet mopping, as dry mops can be used for routine dust removal. The cleaning and maintenance of soft floors, walls, and ceilings, opens up a whole series of labor-saving possibilities in the use of floor scrubbers and wall cleaning machines, and the selection and application of waxes, paints, and other surface finishes.

For vacuum cleaning of pipes, framing and other dust-catching overhead surfaces, and for other overhead maintenance, another mechanical accessory is essential—elevating platforms or stages. A number of these have been developed which are based on good engineering design and which collapse to dimensions permitting handling in narrow spaces and movement on freight elevators. For the purposes of the Maintenance Foreman, assembled staging is not satisfactory as compared to mechanically raised platforms and is not as maneuverable.

Toilet Maintenance

The daily maintenance of toilets and locker rooms is another major concern of the Maintenance or Sanitation Foreman. These "amenities," as the British refer to them, impinge more critically on the comfort and hygiene of the employees than any other plant facility. Unfortunately, a vast number of industrial toilets in America are outmoded, overloaded, or so poorly planned and constructed as to be chronically unsatisfactory and cleanable only with excessive labor. Many industrial plant designers who are keen on devising improved production machinery and materials handling, merely pull out old blueprints of toilet installations, repeat the old mistakes, and give the Maintenance Foreman a never-ending headache. Rarely are those responsible for toilet maintenance consulted on new construction or modernization as to how cleaning labor may be reduced by better equipment and arrangement; and yet in the ordinary industrial toilet, cleaning costs for about five years will equal the cost of the facilities within the room.

Some of the common toilet defects are reviewed here briefly:

One is poor arrangement for traffic flow. The sequence of fixtures should be such as to avoid cross travel, facilitate hand-washing on the way out, and discourage loitering.

Lighting is usually inadequate. Ten foot-candles are a desirable lighting level and light sources should be so located as to give direct illumination of each toilet seat. Most stalls have a light level of less than one foot-candle which induces poor cleaning, and the related employee

(*Please turn to page* 81)

NESTLE'S • PETER'S • RUNKEL'S

CHOCOLATE

COATINGS
LIQUORS
COCOAS

LAMONT, CORLISS & CO.

60 Hudson St., New York 13, N. Y. Branches in Principal Cities

for **TASTE APPEAL!**

. . . A trial order will convince you that **TRUTASTE** APPEAL is YOUR key to repeat sales.

Zestful, Tangy, Imitation *CHERRY*
Full-Bodied , Rich, Imitation *GRAPE*
Luscious, Imitation *STRAWBERRY*
Tantalizing, Imitation *RASPBERRY*

NEUMANN · BUSLEE & WOLFE INC.
224 West Huron Street Chicago 10, Illinois

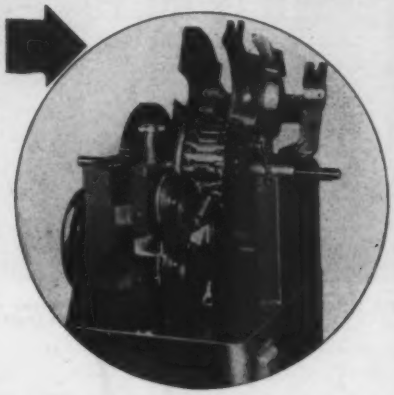
Candy Equipment PREVIEW

THIS SECTION APPEARS QUARTERLY IN THE MANUFACTURING CONFECTIONER

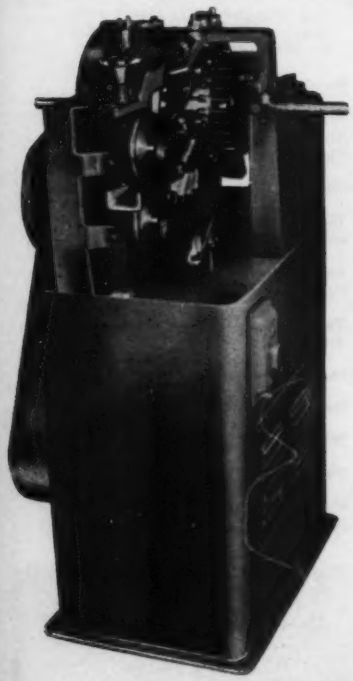
Announcing **THE NEW**

PEERLESS CONTINUOUS PLASTIC MACHINE

Completely Re-designed and Re-engineered



Now has an unlimited production capacity— it will produce excellent plastic or hard candies as fast as your man can feed the machine.



Features:

- New variable speed motor.
- New strip-proof rollers. Only two adjustments necessary on unit for continuous production.
- Die can be removed, cleaned, replaced in less than two minutes.
- Die can be made in a variety of designs.
- Small power consumption.
- Widely used throughout the industry.

It also offers extra added protection for valuable dies; the latest type friction clutch; and special structural improvements in design that add years of top performance to the machine.

See Equipment in
BOOTH 97
at the NCA Convention
June 5th to 8th

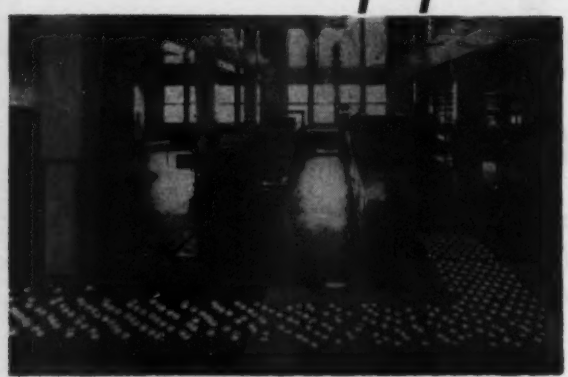
For more information write to

PEERLESS CONFECTIONERY EQUIPMENT CO.

158 Greene Street, New York 12, N. Y.

Buy Performance

Buy Burrell



Burrell installation, above, features a glazed cooling tunnel belt (dark) and a 90° endless turntable belt (light).

First among Candy Manufacturers who want only the *Best in Belts!*

The Burrell Belting Co. research engineers have spent the past five years developing Burrell Plasticoat Cooling Tunnel Belt or Plaque.

THE RESULT: A single texture plasticoat heavy duty belt or plaque for faster cooling, brighter bottoms, and longer wear.

A very thin plasticoat plaque for mirror finish bottoms coupled with a tough, long wearing coating.

Our engineers will be glad to help you with any belting problems you may have. Or . . . if you wish . . . write, call, or wire for recommendations how ***Burrell's better belting*** can maximize your production efficiency.

12 BURRELL STARS

- ★ Plasticoat Cooling Tunnel Belting and Plaques—Single Texture. Heavy Duty or Very Thin Thin-tex Plaques
- ★ Crack-less Glazed Enrober Belting
- ★ White Glazed Enrober Belting Double Texture—Single Texture; Double Coated; Thin-tex
- ★ Caramel Cutter Boards and Belts
- ★ Bottomer Belts (Endless—Treated and Untreated)
- ★ Feed Belts (Endless—Treated and Untreated)
- ★ Packing Table Belting (Treated and Untreated)
- ★ Innerwoven Conveyor Belting
- ★ Batch Roller Belts (Patented)
- ★ Wire Belting
- ★ Vee Belts
- ★ Hose (Air; Water; Steam; Oil; Creamery)

If It's Belting, We Have It

BURRELL

BELTING CO. 7501 NORTH ST. LOUIS AVE., SKOKIE, ILLINOIS

Rosemarie de Paris looks ahead

by **WILLIAM J. CONANT**
Vice-president, Rosemarie de Paris, Inc.

ROSEMARIE DE PARIS has just inaugurated a supplementary line of the famous Rosemarie Formula chocolates. This medium-priced, American type candy was made possible by the installation of a new and sanitary 16-inch coater.

Determined to maintain a policy of "Continental top quality candy for the discriminating American taste," management studied the features of equipment designed for continuous production, attaching great importance to the small details that insure sanitary operation. As a result of these studies, Rosemarie became the first New York City confectioner to install this new Greer sanitary coater which has been inspected and passed by the New York City Department of Health. This is a most important asset as the firm looks ahead and plans further steps in a program of increased production by modern American methods.

While this seems to be quite a contrast to their familiar New York City feature of delivering candy with a horse-drawn 18th century coach, manned by coachman and footman, it is nevertheless typical of the Rosemarie philosophy of providing the consumer with the kind of candy the customer wants, delivered the way the customer wants it.

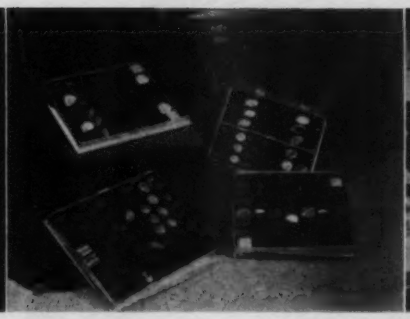
Wearing a full livery of whipcord breeches, black boots, long tan coat with brass buttons, and a silk topper, the coachman and assistant coachman drive from the Battery to 96th Street in Manhattan, delivering from 150 to 200 packages of Rosemarie confections daily.

And in keeping with this philosophy, Rosemarie has for years collected and is constantly in search for the most selective and choice European recipes. Produced with an individuality of shapes and forms, these recipes are made up into tantalizing combinations of taste and beauty. Today many of these same recipes are being varied to meet the modern American taste, as they provide for a supplementary line of American style chocolates produced by modern mechanized methods retaining the recognized quality which Rosemarie is famous for.

And this will be apparent in the smartly simple new candy box which is making its appearance as another of the attractive containers in which this candy is offered. The new box will be prominently displayed in Rose-

1. PRE-BOTTOMER, cooling slab and coater are shown as candy is entering the coater. 2. Closeup of Pre-bottomer being fed by hand. Automatic feeding used for high-speed production not shown. 3. Cooled, highly glossed candy being inspected at the half-way mark and then being lifted into bulk tins at the right end. Equipment shown is GREER.

4. DISPLAY OF ROSEMARIE de Paris line, showing items for Easter and Certificate of Merit of the New York Employing Printers Ass'n for distinctive packaging and printing of the Marie Antoinette package pictured to the left.



5. BOXES OF THE famous Rosemarie de Paris confections, showing four of the most popular assortments in the present line. 6. Rosemarie de Paris store at 684 Fifth Avenue, New York City.

marie's "powder box stores" of glass and satin which reflect both French and modern design, in keeping with the Rosemarie "par excellence" presentation.

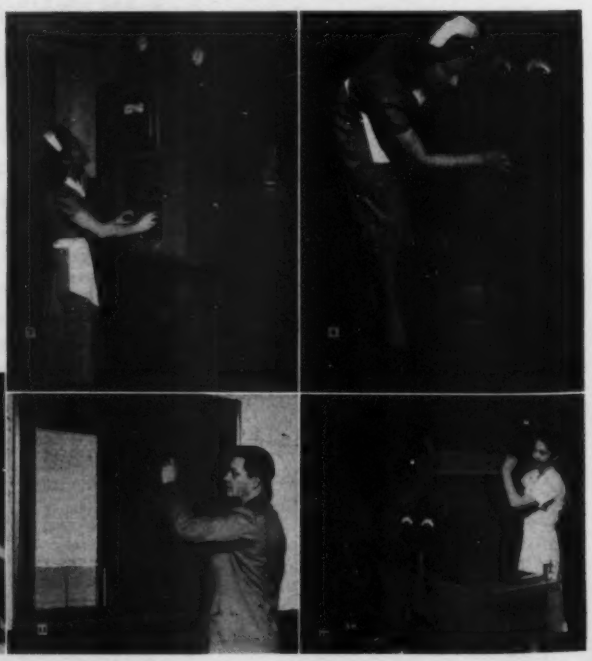
Shown in the accompanying photos is the Greer equipment used to produce this new candy line. Showing prebottomer, cooling slab, coater and cooling tunnel, the various pictures indicate how certain items will be mechanized, whereas continued emphasis (*shown in Photo* 10 —Ed.) will be maintained on fork dipping, hand finishing, and molding of special items.

In the installation of each piece of equipment, management has carefully observed the suggestions of the New York City Department of Health and secured the latest in sanitation features. Such detail considerations as polished welded joints, elimination of slotted screws or bolts, the ease of simple thumb nuts for disassembly of parts and easy removal of scrapers and scraper arms were considered important. Furthermore, since shop time is so valuable, interest centered around time-saving and sanitary operation and features which offer these advantages.

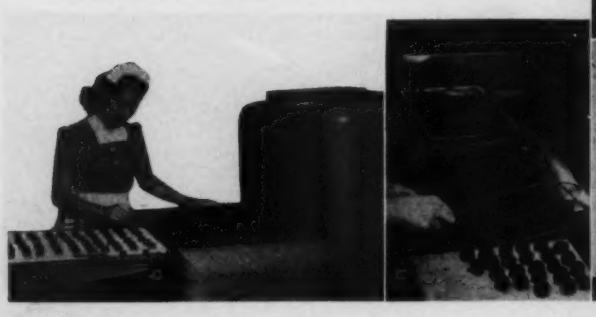
This coater was selected because of its complete accessibility for cleaning by the simple action of lifting the blower assembly and then lifting the wire belt and scraper arm assembly. As may be noted in Photo 13, this easy-to-lift feature was provided for in the design when the parts were arranged so that they counterbalanced each other, thus permitting a girl operator to open it with amazing ease. Operators say they find the new equipment easy to clean and to change from one coating mixture to another. Its ease of operation has permitted new items to be added to the new Rosemarie Production Control Chart, and it is expected that even more will be added. The chart itself permits Rosemarie to schedule production according to the sales reflected by the demands of customers.

Today, Rosemarie has 14 shops in many cities, including such spots as the Greenbrier Hotel at White Sulphur Springs and the American style store in Manhasset, Long Island. Rosemarie also enjoys the patronage of the elite of French society. Its chocolate creations are famous around the world.

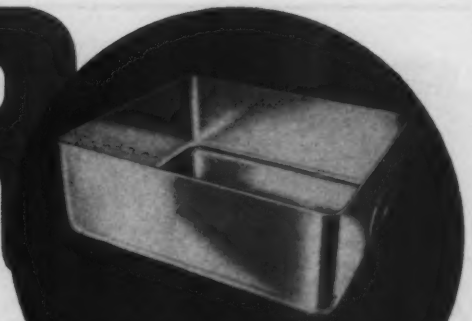
And today, top management is looking further ahead for continued top quality combined with strict sanitation. Additions of the latest in confectionery molding, coating, and cooling equipment have been made or are to be made for the most effective balance of Continental hand-dipping techniques and the best modern American mechanized methods. Such programs as the continuous packing of many assortments, seasonal designing of attractive packages, and closer timing between production and consumption are also considered of prime importance. These programs may be expected to develop as Rosemarie de Paris enlarges upon its policy of "Continental top quality candy for the discriminating American taste."



7. SETTING THE CONTROLS for the Greer Kettle pictured to the rear of the panel. 8. Emptying the chocolate tank by the easy operating, sanitary cut-off valve. 9. Candy leaving the coater goes from the wire belt to the cooling tunnel belt where it goes through the wall from the warm room to the cool room. 10. Fork dipping is used on special items. 11. Controlling production to agree with consumers eating demands is done by Mr. Wheaton, production manager, as he places an expedite flag opposite a behind-schedule item. 12. Emptying the coater for cleaning and sanitary inspection. Note how well balanced the assembly is.



WEAR-EVER ALUMINUM



HANDLING CONTAINERS
for fondants, nuts, etc.

SYRUP PAIL
for all kinds of handling. Fitted with back tilting handle

...efficient because it's made to LAST

When you invest in plant equipment, its life expectancy is an important consideration. That's one reason why you'll find Wear-Ever Aluminum in so many food plants today. Wear-Ever equipment—and only Wear-Ever—is made of an extra tough, extra hard aluminum alloy that gives extra years of service.

Another important feature of Wear-Ever is its cleanliness. Wear-Ever fits in with the sanitation programs now in effect in most candy plants. It is easy to clean, easy to keep clean, is friendly to foods, doesn't affect flavor or taste, safeguards purity. For full information about Wear-Ever equipment for the Candy Industry, mail the coupon today to The Aluminum Cooking Utensil Company, 5704 Wear-Ever Building, New Kensington, Pa.

30 GAL. BATCH CONTAINER
with sanitary, open bead. Also 50 gal. size

WEAR-EVER Aluminum
50TH ANNIVERSARY
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The Aluminum Cooking Utensil Co.
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New Kensington, Pa.

Please supply us with complete information about your sanitary, long-lasting equipment for candy plants.

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COATED CHERRIES

with cordial or rich creme centers easily and uniformly made with

VOORHEES

RUBBER

CANDY MOLDS

"The Mold makes the Difference!"

Here's why so many manufacturers are discarding antiquated methods and using Voorhees Rubber Molds:—

1—Easier to work—Speed and Simplicity

2—No foreign substances—Absolute Cleanliness

3—Better eating quality

4—Better finished product

5—Eliminates waste—Saves Time

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Order a trial mold from your jobber or write us direct.

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RUBBER MFG. CO., INC.

151 East 50th Street

NEW YORK 22, N. Y.

What's New in Candy Equipment

The products described help keep you up-to-date on new confectionery equipment, materials of all types. The items below are coded for your convenience. For any further information, write to THE MANUFACTURING CONFECTIONER, *9 S. Clinton St., Chicago 6, Ill. Use the handy coupon below.*

Odorless Paint Developed

A new odorless paint has been developed and is being marketed, which provides establishments where the annoying odor of paint not only is disturbing to employees and visitors but often penetrates foodstuffs as well, a new pleasant way to get the necessary paint job done. The unscented characteristic is not achieved through the use of a deodorant or perfume to mask the usual discomforting fumes, but is formulated and processed in order to accomplish the result, the manufacturer states *Code M4A50.*

Vacuum Pan Drier

For the recovery of dry solids by the evaporation of solutions or slurries, this manufacturer has designed and constructed a new vacuum pan drier. The unit has a working capacity of 35 gallons, and is designed for a jacket working pressure of 50 psi. The agitator, which has no internal bearing, consists of an anchor with spring-loaded scrapers driven at 40 rpm by a 2 hp right-angle gearmotor. In addition to the charge port and nozzles, sight and light glasses are installed in the top head; and a special flush-type plug valve permits free discharge of the product. *Code M4B50.*

New Meter for Batching Operations

Water, liquid sugar, corn syrup, and other liquids can be automatically controlled by means of this new meter when inserted in the line near the mixing tank, it is announced. Meter automatically shuts off flow after a predetermined quantity has been delivered. Large numerals provide visual check. Shuttered totalizer keeps cumulative totals from which daily, weekly, or monthly figures can be recorded. Flow can be stopped instantly at any time by

Circle Code Numbers and Mail Coupon for Literature on Any Item Discussed in This Section to The Manufacturing Confectioner, 9 S. Clinton St., Chicago 6, Illinois

M4A50 M4B50 M4C50 M4D50
M4E50 M4F50 M4G50 M4H50
M4I50 M4J50 M4K50 M4L50
M4M50 M4N50 M4O50

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NOW you can buy a new Stromberg Time Recorder that will pay for itself in savings in less than a year!

same quality

same features

same guarantee

at a new low price

features

A genuine In-and-Out Recorder—no makeshift.
One hand operation—without delays or fumbling.
Sure-fire printing—in the *right* space.
Top quality construction throughout.
Service tested for low cost maintenance and long life.
Electrically operated.

how it saves

Helps get employees in on time.
Gives an accurate record of hours worked.
Simplifies record keeping and payroll figuring.
Shows that you are complying with wage and hour laws.
Minimum of operating and upkeep expense.

If you are losing 25 minutes a day in time waste, lateness or errors, you are losing a minimum of $100.00 a year that could be saved.

what it costs

now priced at only $97.50 plus tax

It's the only low priced *genuine* In-and-Out Recorder on the market.

See it before you buy any recorder... Return the coupon below for a FREE demonstration, no obligation.

fully guaranteed for one year

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Show me your Model No. 14 Recorder without any obligation. ☐ Other Time Recording equipment.

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increase

YOUR PRODUCTION AND PROFITS

reduce

YOUR OPERATING COSTS

Immediate Deliveries
OF ALL THESE UNITS

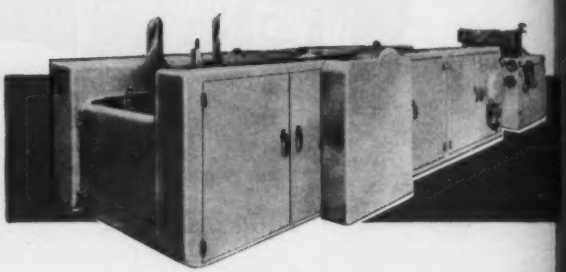
See these new National Equipment Machines

Featuring Outstanding Developments and Latest Improvements

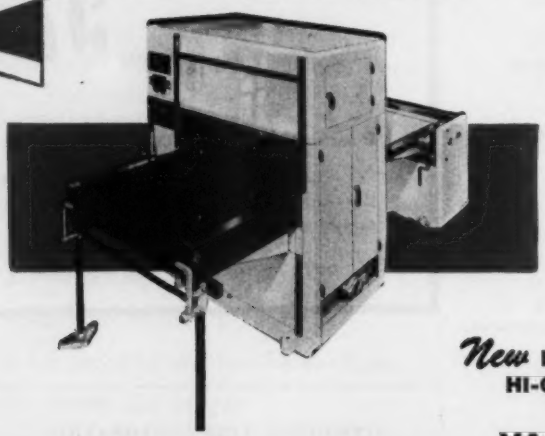
in Actual Operation!

ALL-NEW ALL-STEEL HEAVY-DUTY
NATIONAL MOGUL MODEL M-100

Precision built to the highest engineering standards. Operates at higher speeds, smoothly and with better quality moulding. Harmonic motion travel control device insures trays against jolting starts or sudden stops . . . keeps molds perfectly intact and eliminates scrap. Entire M-100 Mogul is as fine a machine as fifty years of experienced engineering and TESTED AND PROVEN DEPENDABILITY can make it!



New **NATIONAL "Cleanlined" SANITARY HIGH GLOSS** *Enrober*



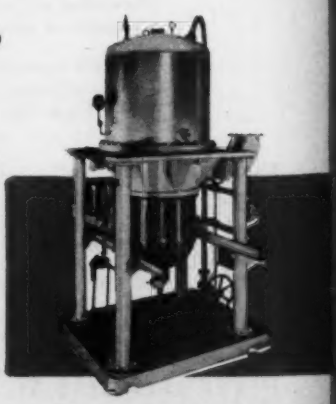
Easy and immediate accessibility for cleaning. Precision-built wire belt Shaker is adjustable during operation to the minutest graduation. Adjustable Blower nozzle is designed for air to flow in at any angle and at any velocity desired. Pumps and tempering column scrapers can be quickly and easily disassembled. Wire belt carrier rolls out easily and uncovers chocolate tank. Large size tempering column gives double capacity tempering surface. Variable speed drive controls flow of chocolate of various viscosities.

CONSULT US ABOUT YOUR PROBLEMS

National engineers are ready to give you ON-THE-SPOT technical consultation and engineering details to meet your individual requirements.

New **NATIONAL HIGH SPEED HI-GLOSS CONTINUOUS HARD CANDY**
VACUUM COOKER

600 to 2500 lbs. hourly production of the finest, clearest, driest and glossiest quality hard candy.
Wide range in speed drive of syrup pump permits a wide range in production. Extra large coil cooking area assures the use of a lower steam pressure. This results in hard candy with a smoother texture. New scientific design cuts steam usage to a fraction.



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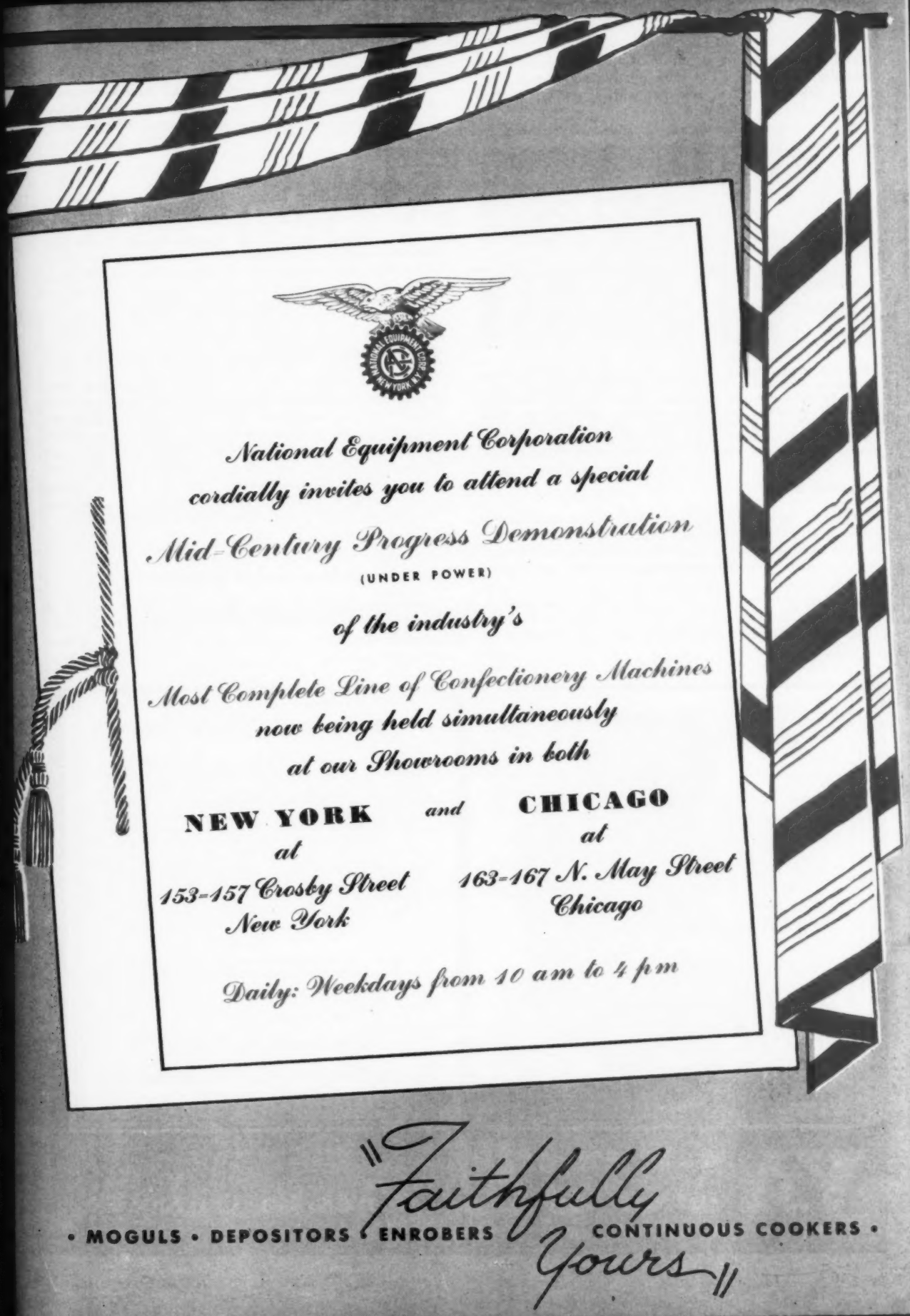
WRITE TODAY OR WIRE COLLECT

NATIONAL EQUIPMENT CORPORATION

153-157 CROSBY STREET NEW YORK 12, N. Y.


National Equipment Corporation
cordially invites you to attend a special
Mid-Century Progress Demonstration
(UNDER POWER)
of the industry's
Most Complete Line of Confectionery Machines
now being held simultaneously
at our Showrooms in both
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at
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and
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Daily: Weekdays from 10 am to 4 pm
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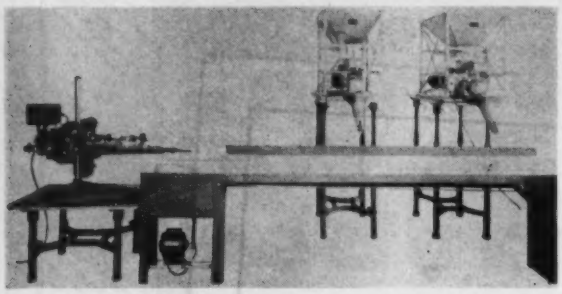
pressing emergency stop button. Capacities: from 30 to 100 gal. per minute. For data on this meter and other meters offered by firm, together with a new 4-page bulletin, circle *Code M4L50*.



UNIT PLANT LAYOUT recently installed in candy plant by Amsco Packaging Machinery, Inc. Included are: Amsco Hi-Speed Automatic Rotary Bag Sealing Machine, Angle Conveyor, two Holm Automatic weighing and filling machines. Simplex high speed automatic bag making machine. Space used: about 4 ft. by 12 ft. Capacity in present plant: 2,400 bags per hour. Simplex can produce 5,000 bags per hour. For more data, circle CODE M4N50.

Versatile Mixer

Variable speed control, heavy duty drive, and special beaters afford wide flexibility that enables this machine to mix batches ranging from a light marshmallow to a heavy nougat, states the manufacturer. Through use of interchangeable bowls which permit preloading one bowl while mixing in another, practically continuous production is possible, says the firm. Mixer is available in 120-, 160-, and 340-quart capacities. Circle *Code M4M50*.

New Catalogs Available

Catalogs covering this firm's steam condensers, steam jet air ejectors, oil and water coolers, packaged power boilers, and centrifugal and piston pumps are now available. *Code M4F50*.

Material Handling Trucks

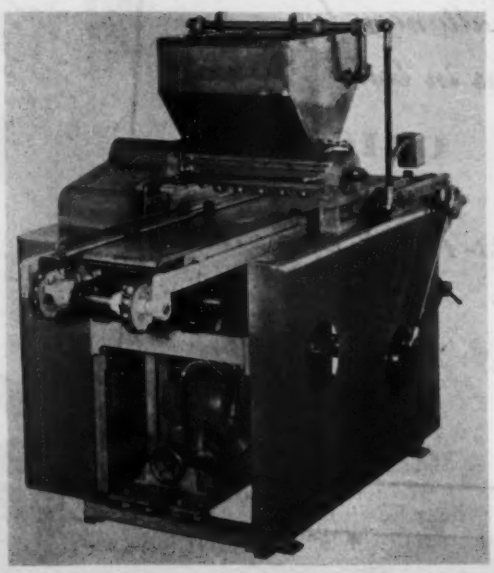
This truck manufacturer offers a plan for the use of pallets with each truck. It is claimed that the pallet plan will eliminate hand stacking of bags, and that the pallets are simple and inexpensive to make. The manufacturer claims that it's material handling trucks are able to save up to 50 per cent on labor. *Code M4C50*.

Stainless Steel Self Priming Pump

The manufacture of a new group of stainless steel self-priming pumps as an addition to this manufacturers liquid handling equipment line is announced. They are available in five sizes, in the following gallons per minute at zero pounds pressure: 3 gpm., 5 gpm., 10 gpm., 20 gpm., and 30 gpm. The pump is used for pumping corrosive liquids, chemicals, drugs, cosmetics, foods, syrup, wines, whiskies, pharmaceuticals, vinegar, etc., and can be installed on all types of installations. *Code M4G50*.

Records, Indicates, Controls Viscosity

Indicating and recording the viscosity of hundreds of industrial liquids while under actual processing is made possible by a new viscometer, it is claimed. The instru-



THE RACINE DEPOSITOR

is made in two sizes, 16" Junior, and 32" Senior, for depositing in starch, or rubber moulds, paper, tin or glass cups or direct on trays, plaques, polished steel, or rubber belts. **The Racine Depositor** will handle such varied products as cream, gum, grain work, marshmallows, coconut slugs, or coconut bars, and chocolate bars, with or without nuts and fruits, as well as chocolate stars, kisses, buds, wafers, patties, non pareils, and midget bits cast direct on polished steel belts.
It operates without pumps, the depositing being done by means of oscillating shafts. This action is such that exactly the same amount of material is discharged through each outlet, making the goods run uniform in size and weight.

The Racine Depositing Shaft permits deposits of many sizes, shapes, and spacings by using special designed nipples, etc.

For more information, write to:

Vacuum Candy Machinery Co.

Racine Confectioners' Machinery Co.

VACUUM RACINE **Candy Machinery Co.**

15 PARK ROW, NEW YORK 7, N. Y. FACTORIES: HARRISON, N. J. RACINE, WIS.

Do Your COOLING TUNNEL BELTS Crack Up Too Fast?

Not if they're VOSS Belts! Years of specialization in Candy Plant problems have taught us how to make Glazed Enrober Belting that will stand the gaff—Belting that won't start to crack almost the minute you put it on the machine, but which *resists* cracking, even under heavy-duty use.

Special Coating formulas—the manner in which they are applied—the type, weave, texture and weight of the Belt itself—all these elements are prescribed with care to give the long, satisfactory performance which put VOSS Belts way out in front with candy plant men. One told us recently: "This VOSS Belt is the best we've had for the purpose in my thirty-odd years in the business!"

Here's a brief list of outstanding Belts VOSS is producing for candy makers—Belts which will cure *your* interrupted-production and replacement-expense problems, too:

- **HI-GLOSS No. 3 *PLASTIC***

  A cooling tunnel Belt that's different from any other—easy to splice, and can be run immediately—jiffy cleaning for better sanitation—and puts sales-aiding glossy, mirror-like bottoms on your chocolates! Fine for plaque work, too.

- **HI-LUSTER HEAVY-DUTY** — Double Texture, Black or White

  A Belt that's built to take it, and *keep on* taking it, under tough conditions. Exceptionally fine for heavy bar work.

- **WHITE *LIGHTWEIGHT* OILCLOTH** — Single Texture

  Just the right Belt for small pieces—widely used for miniatures.

- **DOUBLE-COAT *LIGHTWEIGHT* OILCLOTH**

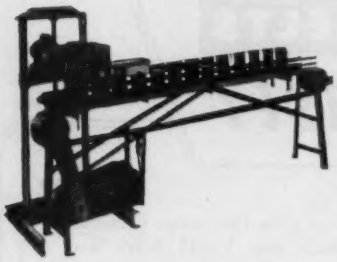
  Designed especially to assure fine bottoms—ideal for plaque work.

No matter what type of equipment you operate, VOSS can supply a long-life, true-performance Belt to give you relief from Belt troubles. Call VOSS today!

To serve Eastern customers better, VOSS has just established a New York office, staffed by A. T. Stevens and Al Horka. The address:
118 E. 28th St., New York 16, New York

VOSS BELTING & SPECIALTY CO.
5647
NORTH RAVENSWOOD AVENUE
CHICAGO 26, ILLINOIS

ment is particularly adaptable for food, textile, chemical, paper, plastic, and varnish industries where constant viscosity is important, states the manufacturer. When used with a recorder, it is said, it can be used as an automatic controller with built-in audible or visual alarms. *Code M4H50.*



NEW sectionalized "Pack-Rite" belt conveyor handles bags from 2 in. in height to 18 in. or more; flat, to 6 in. thick and any length. Circle CODE M4050.

New Literature on Generators

This generator manufacturer has recently released seven new pieces of literature on the firms complete line. This literature includes descriptive specifications and dimensions of each series. *Code M4E50.*

Portable Chocolate Tempering Mill

Capable of increasing production of a hand dipper by 20 to 30 per cent, according to the manufacturer, this portable chocolate tempering mill continuously and automatically melts and tempers chocolate. Capacity is 100 lbs. of chocolate. The kettles are electrically heated and thermostatically controlled. For additional data, circle *Code M4I50.*

Humidity-Temperature Indicator

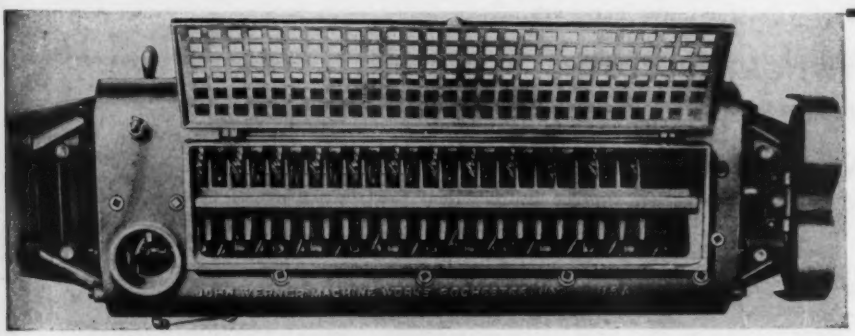
A new direct reading instrument which shows at a glance the relative humidity and temperature of the air to which it is exposed is announced by this firm. Humidity scale is graduated into 10 equal divisions from 0 to 100 per cent over an area of 2½ in. Red liquid thermometer of lens front type is reported accurate to within 1° at 70°F. Humidity sensing element is composed of 216 in. of fine blond human hair. Overall dimensions: 5⅜ in. long by 3⅜ in. high by 1 11/16 in. deep. Circle *Code M4J50.*

New Ingredient Batch Scale

A new ingredient batch scale with a triple beam assembly is available from this firm, for compounding, mixing, and blending general ingredients. Scale makes possible mixing of many ingredients on a single scale, where heretofore many separate scales were used, reports firm. A special over- and underweight indicator speeds up weighing. *Code M4K50.*

Stainless Steel Chemical Container

A all stainless steel chemical container has been developed to be strong, long lasting, easily cleaned, and easy to handle, the manufacturer states. Being stainless the container can be used for a wide variety of liquid chemicals, food syrups and flavors, oils and extracts. The container has a capacity of 15 gallons yet weighs only 27 pounds. *Code M4D50.*



Inside view 50" Snow Flake Cream Beater, with baffles, open top and water jacket.

"When your formula" includes corn syrup!

For smooth, white fondant that is uniformly tender

The Snow Flake Cream Beater is a MUST

The Beaters running between diagonal baffle plates assimilate all ingredients, aerating and whitening the Fondant.

Years of experience have proved and verified our claim that the Snow Flake Cream Beater is engineered to handle fondant with corn syrup better and faster, with the desired result at its maximum.

Make your next installation a Peerless Syrup Cooler and Snow Flake Cream Beater.

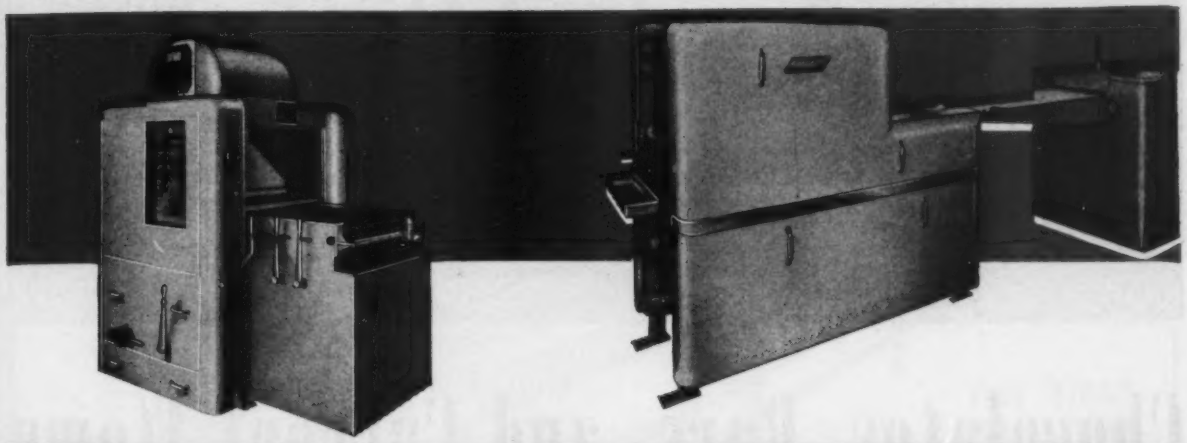
To Prospective Purchasers of USED WERNER EQUIPMENT.

When considering the purchase of used equipment it is advisable to determine the exact age of such equipment. It is suggested that you obtain the serial number of any of our equipment under consideration and write to us, the original manufacturers, requesting information as to its age and the availability of parts for repairs. We, as manufacturers of this equipment, will be glad to co-operate by supplying this information.

JOHN WERNER & SONS, INC.

713-729 Lake Avenue **Rochester 13, N. Y.**

Speed Production with **GREER** *Equipment*



GREER COATERS

for heavy duty usage at minimum maintenance. Produces smoother, more uniform coating . . . higher gloss . . . longer shelf life. Recognized as the world's standard for high quality, high production coating.

GREER 16" COATER

features all sanitary construction and variable speed drive for use with plaques or cooling tunnel. The GREER Coater, which separates into two hinged units for convenient cleaning or changeover, turns out high quality candies at a rate faster than any other coater available.

J. W. GREER COMPANY

Continuous Production Equipment

133 WINDSOR STREET, CAMBRIDGE 39, MASS.

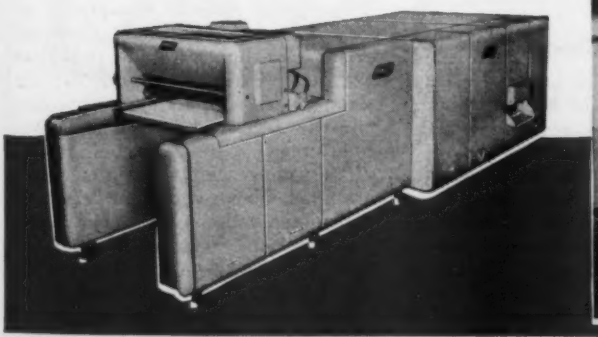
GREER

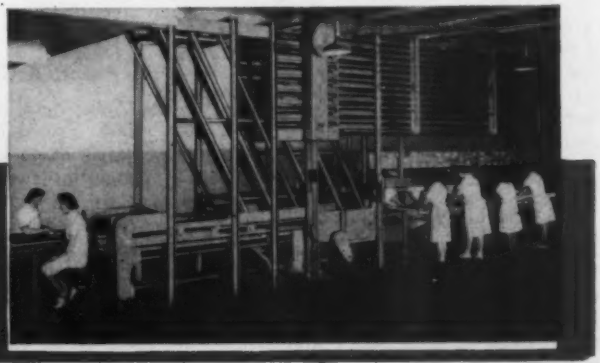
GREER MULTIMOLDER

for fast, clean, starch molding. New conveying method eliminates tray trouble. Gyratory cleaner for completely effective starch removal. Electric push button control. Engineered to meet today's requirements for high speed, high quality production.

GREER MULTI-TIER

for maximum cooling time in minimum space at minimum cost. Utilizes wasted overhead space . . . requires less floor space than shortest tunnel. Completely automatic continuous operation . . . eliminates costly handling. Many Multi-Tiers pay for themselves in less than two years.





Write today for Catalog of **GREER** *Confectionery Equipment*

Chocolates, Bars, and Current Items

Assorted Chocolates

ANALYSIS: Sent in for analysis. 1 lb. box, no price stated. Box is of single layer type with extension top and bottom. Red glazed paper embossed in gold. Cellulose wrapper. Appearance of box on opening and the appearance in general is good. There are 43 dark coated, two foiled, one gum drop, and four panned kernel paste pieces. The coating's color, gloss, strings, and taste are good. Of the centers the jelly and caramel, maple nut cream, brazil, almonds, chocolate almond caramel, cordial cherry, jelly and marshmallow, chocolate caramel, date, filbert, caramallow, solid chocolate, chewy toffy, coconut cream, nougat, cordial raisin, vanilla cream, and orange gum are good. The lemon cream, pink cream, red cream, and pink jelly had a poor flavor; the last three could not be identified. The panned kernel taste and peppermint creams are good.

REMARKS: Too many creams for a pound assortment. Suggest a number of flavors be checked and a better grade be used. Suggest a few hard candy centers to improve the assortment. *Code* 4*A*50.

Assorted Chocolates

ANALYSIS: Purchased in a San Francisco drug store at 1 lb. for 62 cents. Appearance of package is good. Box is of one layer type, white paper top printed in gold, black and red. Cellulose wrapper. Appearance of package on opening is good. There are 16 dark coated pieces and 20 light coated. The coatings' colors, gloss, and strings are good. Taste is also good for chocolates of this price. Of the *light coated centers*, the nut crunch, vanilla caramel, maple cream, orange cream, chocolate cream, rasin cluster, nougat, filbert cluster, chocolate caramel, and mint cream are good. The nut jelly centers have good texture, but the flavor could not be identified. The chocolate paste is dry and hard. Of the *dark coated centers*, the nougat, mint cream, maple cream, orange cream, vanilla nut caramel, filbert cluster, nut cream, and nut and raisin cluster are good. Chocolate fudge is fair.

REMARKS: Suggest manufacturer check up on his cost on this box of chocolates. At the retail price of 62 cents, there is not a "living" profit in this box. Assortment contained too many of the same creams. Some of the flavors need checking up. The best box of chocolates at this price that we have examined in over a year. *Code* 4*H*50.

Assorted Chocolates

ANALYSIS: Sent in for analysis as No. 4667. Priced at $1 the pound. Appearance of package is good. Box is of one layer type, buff colored paper top printed in green. White paper wrapper tied with red twine. Appearance of package on opening fair. There are 11 dark coated pieces and 19 light coated pieces. The coatings' colors, gloss, strings and taste are good. Of the *light coated centers*, the chocolate cream, vanilla caramel, cordial cherry, maple nut cream, nut toffy, Brazils, vanilla cream, cashew cluster, chocolate nut cream, and nougat are good. Pink cream's flavor could not be identified, and the hard candy blossom is too hard. Of the *dark coated centers*, the vanilla cream, nut buttercream, chocolate cream, and cordial cherry are good. Flavor could not be identified in the pink cream and pink jelly. The assortment is good.

REMARKS: A good assortment of chocolates at $1 the pound. Suggest some flavors be checked up. Box is too large for a pound assortment. Suggest a smaller size box or a good divider to keep pieces in place. *Code* 4*I*50.

Assorted Chocolates

ANALYSIS: Sent in for analysis as No. 4668. Priced at $1.25 the pound. Appearance of package is good. Box is of two layer type, full telescope. White embossed paper top printed in black. Valentine paper wrapper, imprint of hearts in colors. Tied with white grass ribbon. Appearance of box on opening is good. Coatings' (dark and light) colors and gloss are good; strings are fair. Of the *dark coated centers*, the chocolate coconut cream, chocolate paste, vanilla cream, vanilla caramel, vanilla fudge, sponge chip, and mint cream are good. Flavor could not be identified in the yellow cream. The pecan top chocolate cream is fair. Of the *light coated centers*, the vanilla cream, vanilla caramel, peanut butter cream, vanilla nut cream, pecan cluster, peanut cluster, and vanilla coconut cream are good. Could not identify flavor in the light yellow cream. The vanilla cream rolled in

A Profit-Paying Investment...

THE SAVAGE CONTINUOUS CANDY CUTTER

(Brach Patent)

Floor Space, 26"x35' Shipping Weight 1,250 lbs.

THE FIRST COST IS THE LAST COST

No additional chains to make different shapes--changes from one style to another instantly.

Without any adjustment or change the Savage Continuous Candy Cutter will cut any Pillow shaped goods, Chips, Straws or Waffles—either hard or soft centers—and cuts any width or thickness from the thinnest straws to ¾ inch, and from ⅜ to 1½ inches in length.

1. BABY KISSES—any small piece ⅜-inch long and up to ¾-inch wide—are cut on this series of knives.
2. PILLOWS, CHIPS, STRAWS—¾-inch long and ⅛ to 1½ inches wide—are cut by this set of knives.
3. STRAWS, CHIPS, PILLOWS—1½ inches long and ⅛ to 1¾ inches wide—are cut on this series of knives.
4. WAFFLES—¾-inch long and up to ¾-inch in width—are cut and stamped with this series of knives.
5. THE GUIDE—illustrated separately to the left, has two peculiarly shaped knurls which may be so turned and separated as to regulate the batch to any width from ⅛ to 1¾ inches as desired. Adjustments are made by simple thumb screws. An experienced operator can feed the machine without using the guide.

THE GUIDE — the only part of the entire machine that is changed.

High Speed--No Delays-- *Increased Output*

Perfect Cutting--No Waste-- *Reduces Cost*

(Also sold without conveyor)

Since 1855

SAVAGE BROS. CO.

Over 93 Years Manufacturing Quality Food Equipment

2638 GLADYS AVE. **CHICAGO 12, ILL.**

coconut (foiled) is good. Assortment is good.

REMARKS: One of the best $1.25-a-pound chocolate boxes we have examined this year. Suggest some of the flavors be checked, however. *Code* 4J50.

Chocolate Coated Almond Bar

ANALYSIS: Purchased in a Milwaukee restaurant at 1⅜ oz. for 5 cents. Appearance and size of bar are good. Wrapper is of glassine printed in dark brown. Name in yellow. Bar's milk chocolate coating is good. Chocolate sponged hard candy center's color, texture, and taste are good. Almonds are good.

REMARKS: One of the best 5-cent coated bars we have examined in some time. Suggest manufacturer check the cost on this bar; we doubt if there is a "living" profit in it at 5 cents retail. *Code* 4F50.

Chocolate Coated Sponge Bar

ANALYSIS: Purchased in a Milwaukee restaurant at 1 oz. for 5 cents. Appearance and size of bar are good. Wrapper is of glassine printed in yellow. Name in dark brown. Imprint of sponge in colors. Bar consists of two pieces. Dark coating is good. Center's color, texture, and taste are good. Sponge is very good.

REMARKS: One of the best chocolate coated sponge bars on the market. *Code* 4G50.

Crunchy Almond Bar

ANALYSIS: Purchased in a Milwaukee restaurant at 1 oz. for 5 cents. Appearance and size of bar are good. Wrapper is of cellulose printed in red and white. Light coating is good. Center's color, texture, and taste is good.

REMARKS: The best crunch bar of this size we have examined in some time. *Code* 4K50.

Peanut Brittle Bar

ANALYSIS: Purchased in a Milwaukee restaurant at 1¼ oz. for 5 cents. Appearance and size of bar are good. Wrapper is of cellulose printed in red and yellow. Color of bar is good. Texture, fair. Peanuts are not roasted enough. Taste is fair.

REMARKS: Bar is not up to standard. Candy was chewy; not cooked high enough. Peanuts were almost raw. Lacked a good taste. Suggest more salt be added. *Code* 4L50.

Almond Paste Bar

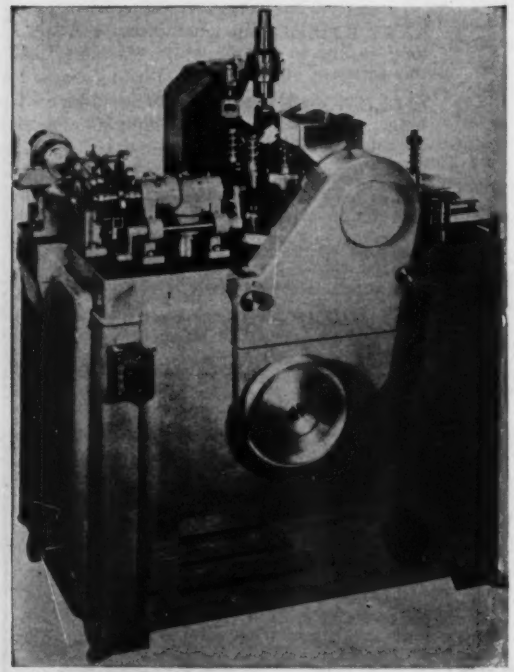
ANALYSIS: Purchased in a Libertyville, Ill. supermarket. Priced at three for 12 cents, 3/4 oz. apiece. Appearance of bar is good. Inside wrapper is paper backed foil. Yellow cellulose outside wrapper printed in white and red. Bar's light coating is good. The center's color, texture, taste, and almonds are good.

REMARKS: The best bar of this kind the Clinic has examined this year. *Code* 3I50.

Assorted Hard Candy Sticks

ANALYSIS: Sent in for analysis as No. 4663. 20 pieces, 5 oz., no price stated. Appearance of package is good. Container is white folding box, window type; printed in red, yellow, and blue. Imprint of duck in colors. Sticks are wrapped in cellulose wrapper. Sticks' colors, stripes, gloss, texture, and spinning are good. Flavor is fair.

REMARKS: Attractive novelty package for hard candy sticks. Suggest



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- HIGH SPEED PRODUCTION
- CONTROLLED WT. & SIZE OF POPS
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REPRESENTATIVE
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MILL RIVER PUMP BARS

Scientifically Designed Without Grooves or Washers

After exhaustive on-the-job comparative tests, Mill River Pump Bars won out over all competition with one of our foremost Candy Manufacturers. That's what we like . . . we don't merely want you to take our word for the superiority of these Pump Bars, we want you to put them to the test and prove it.

MILL RIVER Water-Sealed Pump Bars are the direct achievement of over forty years of engineering progress in designing and manufacturing equipment for makers of candy.

They are of the highest quality bronze with stainless steel valves and pistons. They are precision-made in the smallest detail to assure accuracy.

Built without grooves or washers they are easy to keep clean and will stand up rigidly under long stress and strain.

Available in all sizes . . . single, double, triple and quadruple for Mogul or Separate Depositors. Special Bars for Chocolate Work.

Details, prices, etc., gladly upon request.

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STANcase EQUIPMENT

MODEL No. 18
Inside Dimensions
Length – 43⅛"
Width – 22⅛"
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Sanitary

STAINLESS STEEL TRUCKS FOR FONDANT CREAM &c.

Write for descriptive literature of this, and other models available for immediate delivery.

Manufactured by
The Standard Casing Co., Inc.
121 Spring St., New York 12, N. Y.

a better grade of flavors be used. We find oils are best for hard candies. *Code* 4*D*50.

Hard Candy Cane Ribbon Candy

ANALYSIS: Send in for analysis as No. 4666, ⅞ oz., no price stated. Appearance of cane is fair. Cellulose wrapper, white paper seal printed in blue. Gloss, none. Stripes, texture, and flavor are fair.

REMARKS: Candy is not cooked enough. Color used in stripes is not right, looks "wet". The same can be said about the ribbon candy. The ribbon candy appears poorly made and lacks good flavors. *Code* 4*B*50.

Peanut and Cream Pattie

ANALYSIS: Purchased in a Libertyville, Ill. supermarket at 1 1/2 oz. apiece, 3 for 12 cents. Appearance and size of pattie are good. Wrapper is of glassine printed in yellow, blue, and white. Pattie's light chocolate coating is good; peanuts are good; the center's color, texture and taste are good.

REMARKS: One of the best patties of this kind we have examined this year. *Code* 3*L*50.

Peppermint Cream Bar

ANALYSIS: Purchased in a Chicago railroad station at 1 1/2 oz. for 5 cents. Appearance and size of bar is good. Wrapper is of white glassine printed in green. The bar has a dark coating which is good. The center's texture and color are good; flavor is weak.

REMARKS: Suggest again as much flavor be used to improve the taste. *Code* 3*K*50.

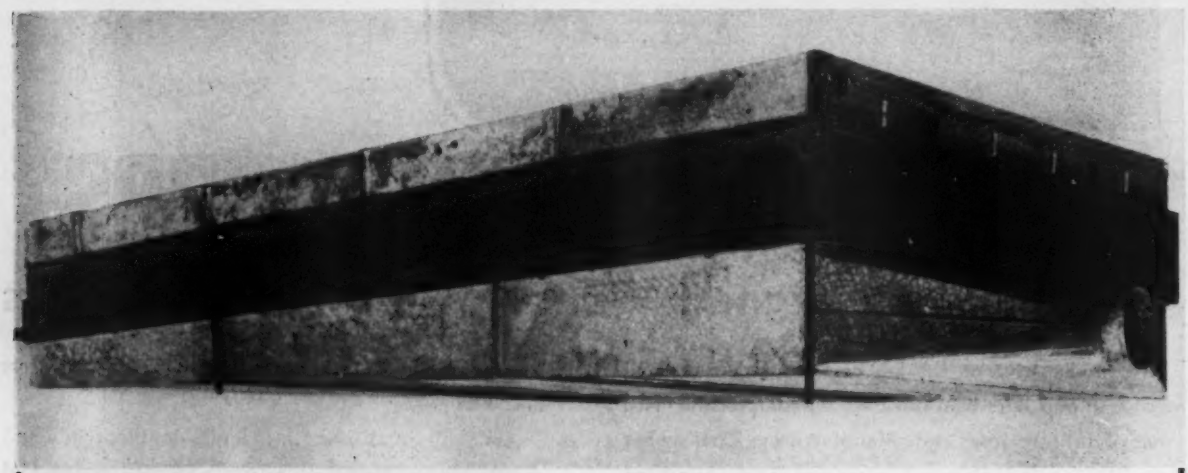
Marshmallow Peanuts

ANALYSIS: Obtained in New York. Appearance of package is good. Container is tray, overall wrapped in cellulose printed in red, white and blue. The marshmallow peanuts' color is good; texture very hard; flavor too strong.

REMARKS: Not a good eating marshmallow peanut. Too hard to eat and entirely too strong. *Code* 3*P*50.

Jelly Hearts

ANALYSIS: Purchased in a Libertyville, Ill. supermarket at 12 oz. for 19 cents. Appearance of package is fair. Container is cellulose bag, pa-



WOLF — SHEFFMAN STARCH CONDITIONER

Uniformity .. Uniform starch at proper temperature and moisture content regardless of outside weather conditions, results in uniform candy, eliminating scrap.

Savings .. Properly conditioned starch reduces drying time, in turn saving floor space, starch and boards.

Your inquiries on starch conditioning and cleaning systems cordially invited.

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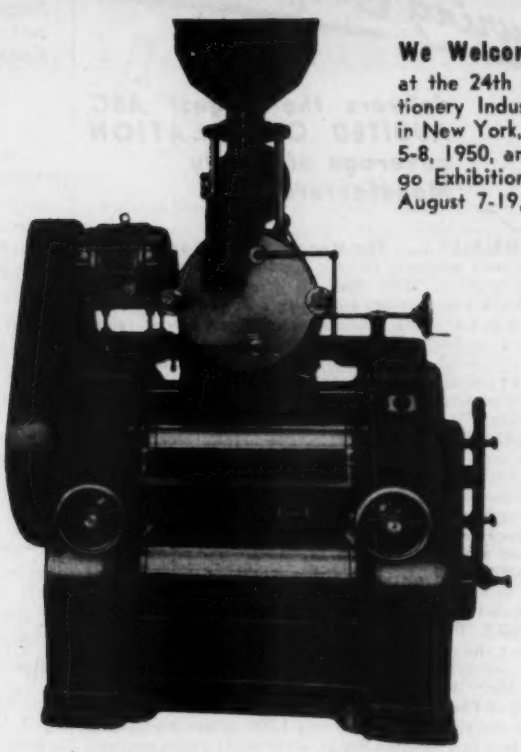

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at the 24th Annual Confectionery Industries Exposition in New York, Booth 93, June 5-8, 1950, and at the Chicago Exhibition, Italian Stand, August 7-19, 1950.

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—Type MD/320 hourly output 100/200 lb.
—Type MD/332 hourly output 300/600 lb.
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—Smooth running.
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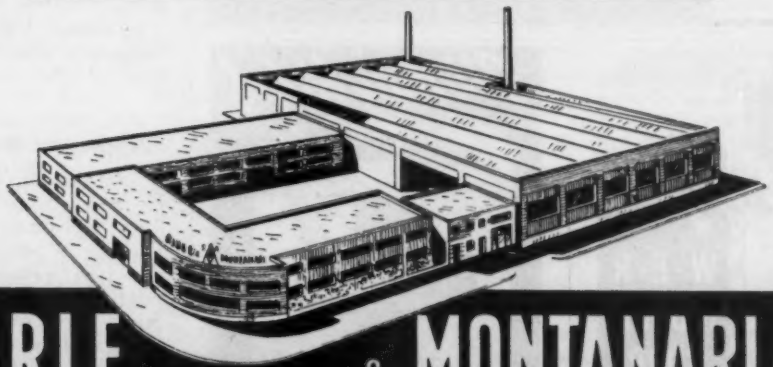

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that spends over a half billion dollars annually for materials, parts, containers, supplies, plant and equipment . . .

The Manufacturing Confectioner

delivers the largest ABC AUDITED CIRCULATION coverage of Candy Manufacturers . . .

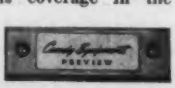
EDITORIALLY . . . *The Manufacturing Confectioner* is the *only* magazine devoted specifically to manufacturing executives. More than 50 great "How to Make" articles a year appear, more pages of production techniques and research than any other paper, newest candy making methods and developments in plant operation and successful management, planned series articles on current manufacturing problems, plus such creative services to readers as "The Candy Clinic" and "The Packaging Clinic."

INTENSIVE READERSHIP . . . is naturally earned because such balanced editorial service helps candy manufacturers make profits. At least one article serves the executive responsible for each candy plant function assuring advertisers that the pages of ***The Manufacturing Confectioner*** will hold the active interest of the men covered by the circulation.

IN ADDITION . . . advertisers get bonus coverage of their prime prospects in these two individually printed magazines:

CANDY PACKAGING—Each quarter the entire "Candy Packaging" department from the February, May, August and November issues of ***The Manufacturing Confectioner*** is reprinted as an individual magazine and 1,000 copies are distributed free to a selected list of candy plant executives who control packaging material purchases. Packaging advertisers in these months get bonus coverage in the supplement.

CANDY EQUIPMENT PREVIEW—This supplement is reprinted from the January, April, July and October issues of ***The Manufacturing Confectioner,*** including the advertising of machinery and equipment in those issues. The "Preview" is sent to plant engineers and machinery buyers in the large factories and is such constructive publishing on candy machinery it wins exactly the right reader interest to support machinery advertising.



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The MANUFACTURING CONFECTIONER PUB. CO.
7 South Clinton Street, Chicago 6, Ill.
303 West 42nd Street, New York 18, N. Y.

per clip on top, red printed in black. Heart's color, shape, texture and sanding are good. Flavor is poor.

REMARKS: A well made jelly piece, but flavor is not up to standard. Suggest a better grade of flavor be used. Suggest cellulose bag be printed in two colors to make it more attractive. *Code* 3*M*50.

Sponge Candy

ANALYSIS: Purchased in a supermarket in Libertyville, Ill., at 4½ oz. for 19 cents. Appearance of package is good. Wrapper is of cellulose printed in brown and white. Sponge candy's color and taste are good; texture is too hard.

REMARKS: Suggest formula be checked, as piece is too hard. This type of candy has to be very porous to be good eating. *Code* 3*S*50.

Assorted Licorice Candies

ANALYSIS: Sent in for analysis as No. 4658. Priced at 1/2 lb. for 29 cents. Appearance of package is good. Container is folding box, overall imprint of licorice candies in colors. Cellulose wrapped. Candy's colors are too bright, texture is good, flavor fair.

REMARKS: Not up to standard sold on the American market. Lacked a good strong licorice flavor. *Code* 3*X*50.

Chocolate Cigars & Cigarettes

ANALYSIS: Obtained in New York. Appearance of package is good. Container is folding box printed in light brown and red. Two oval cellulose windows. Box contained solid chocolate cigars in cellulose tubes. The cigar's chocolate (dark) gloss, molding, and taste are good. The cigarettes solid light chocolate's color, gloss, molding, and taste are good.

REMARKS: A good looking novelty. Suggest a retail price of 25 cents. *Code* 3*U*50.

Peppermint Hard Candy Sticks

ANALYSIS: Sent in for analysis as No. 4664. No price stated, 20 sticks, 5 oz. Appearance of package is good. Package is white folding box, window type; printed in red, blue, and yellow. Imprint of duck in colors. Sticks are wrapped in cellulose. Sticks' colors, stripes, gloss, texture, spinning, and flavor are good.

REMARKS: An attractive novelty package for hard candy sticks. Sticks are good eating. *Code* 4*E*50.

COCOA BUTTER—*its crystallization habits and their effect on chocolate*

by **NORMAN W. KEMPF**
Manager of Research, Walter Baker Chocolate & Cocoa Div., General Foods Corp.

THE SUBJECT OF the application of chocolate coatings to centers has been exhaustively covered in past conferences held here. It has also been made clear that the behavior of chocolate coatings is largely determined by the properties of cocoa butter because, fundamentally, melted chocolate consists of a suspension of solid particles in a continuous phase of liquid fat.

This circumstance also governs some of the physical properties of solid chocolate. When the melted chocolate is frozen it follows that the actual surface is a film of pure cocoa butter and the gloss obtained on the finished product depends on the nature of the surface of this cocoa butter film.

Accordingly, an understanding of the properties and behavior of cocoa butter is essential in explaining the various phenomena which attends the setting of chocolate and its subsequent behavior. It is the purpose of this paper to review with you the facts about cocoa butter crystallization which can be found in the literature and to discuss their effect on the behavior of chocolate. It is hoped that an understanding of the basic principles will make it easier for you to handle any new situation which may come up in the normal course of operating a candy plant.

Cocoa Butter Defined

For this reason we will consider those properties of cocoa butter which affect the use of chocolate coatings in the confectionery industry. Cocoa butter is defined by the U. S. Pharmacopeia as fat obtained from the roasted seed of Theobroma Cocoa Linne. The melting point range permitted is 30° to 35° centigrade. An examination of the chemical literature shows that relatively little fundamental work has been done on this important fat.

In 1936, T. P. Hilditch and W. J. Stainsby published the result of work they had done to determine the components of cocoa butter. This work covered samples taken in 1927 and 1936. They concluded that the major component of cocoa butter was oleo-palmito stearin which represents 52 percent of the glyceride present, the balance being a mixture of glycerides which contained two of the common fatty acids linked to the glycerol base. In this mixture they found every possible combination of the three common component fatty acids except simple tri-glycerides. They found relatively little variation between the samples taken in 1927 and 1936. It is a great blessing to our industry that cocoa butter remains fairly constant in composition in spite of the wide variety of plants from which it is derived. The properties of cocoa butter which interest us the most are its behavior during melting and setting. If it were a simple, pure compound instead of the mixture determined by Hilditch and Stainsby, it would have a sharp and definite melting and setting point. Being a mixture, however, the individual fats present, being miscible and soluble in each other, influence each other's melting points. As is the case with most such mixtures, it is possible to achieve conditions which will permit the fractional crystallization of individual pure fats from the mixture, but in normal handling of chocolate these conditions are rarely obtained, and our major problem is the behavior of the mixture as a mixture. When such a mixture crystallizes the individual crystals of each component form independently, but are closely associated with those of the other components which are being formed at the same time. In our normal handling of chocolate we do not allow time enough for the separate crystallization of the components.

Nature of Crystallization

Let us now consider the nature of the crystallization which takes place. Studies made by Clarkson and Malkin reported in the Journal of the Chemical Society (London) and unreported work done independently by Dr. A. C. Shuman have shown it is possible for fats to crystallize in at least four different crystal forms. Only one of these forms is stable, therefore, fats which have crystallized in any of the other three forms will eventually revert to the stable form. Generally speaking, unstable forms of crystals are those in which the internal structure creates stresses which tend to force a realignment when conditions permit. Time is a very important factor in determining the type of crystal pattern which is adopted by the fat in crystallizing. Another factor lies in the energy involved in the formation of such a crystal pattern. A certain amount of energy is released when the pattern is formed and conversely must be supplied to destroy the pattern and produce a liquid. The term latent heat of fusion is applied to the heat units which are required to change physical state without causing a change in actual temperature. The formation of stable crystals requires the removal of all the latent heat of fusion of cocoa butter. Only part of this latent heat is required to form the intermediate unstable forms of crystals. Therefore, when the unstable forms change to the stable form, the balance of this latent heat is released. If this release of latent heat takes place under confined conditions a local rise in temperature is generally the result. This changeover with an accompanying release of latent heat is undoubtedly one of the causes of fat bloom.

Minimizing Fat Bloom

For a better understanding of fat bloom, we must, therefore, study the crystallization of cocoa butter if we are to do anything in our handling of chocolate to minimize fat bloom. We must also learn to favor these conditions which will produce the stable form of crystal when the chocolate is applied as a coating.

The microscope is a very useful tool in making such a study, especially when used with polarized light, which

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increases our ability to see crystal structures. If we cause cocoa butter to crystallize on the stage of the microscope, quietly without agitation, and observe the action with the benefit of polarized light, we may observe the following sequence of events: before any crystals have appeared the field is blank. The first visible sign of crystal formation is seen when a few tiny, needle shape crystals appear scattered throughout the field. Instead of an orderly increase in the number of such crystals in new locations in the field, we next observe the formation of additional crystals apparently superimposed on the original crystals with their axes crossed and from then on this type of crystal growth proceeds faster than does the formation of new single crystals. Eventually, a bundle of the needles is formed around each original single crystal, and growth continues until the bundles join up to form a solid mass.

Agitation Important

If we subject our crystallizing butter to forces such as occur in the agitation accompanying the tempering of chocolate, we can prevent the building up of such bundles by tearing off the loosely bound superimposed crystals. When we tear these bundles apart, each independent crystal tries to start its own bundles forming in its new location and the rate of crystal formation is multiplied very considerably. That is the reason why agitation is such an important part of the tempering process. We spread the seeds which have already been formed and encourage growth of more crystals.

Now that we have observed the method in which these crystals are formed in cooling cocoa butter, let us consider those factors which determine the type of crystal which is formed under any particular set of conditions.

Unfortunately, when cocoa butter is cooled rapidly, all four types of crystals are produced simultaneously and, as like begets like, each seed produced encourages latent heat as is possible and we, therefore, want to the growth of more of the same type in its own location. For a stable product we want to remove as much of the create a majority of the stable form of seed and destroy, if possible, the unstable form.

Heat Removal Rate

The rate at which heat is removed is the most important factor in determining the type of crystal form, and a slow rate of heat removal, accompanied by a moderate amount of agitation, favors the formation of stable crystals. A rapid removal of heat produces not only stable crystals, but the unstable forms as well. We all know that the time honored method of tempering chocolate, in which two to four hours are used in cooling chocolate in a tempering kettle with moderate agitation, gives us good results. As with this slow heat removal we also know that efforts to hasten this process by a more rapid removal of the heat generally give us trouble. Some people cool their chocolate more rapidly, bringing it down 2 or 3° below the temperature of application and then raise the temperature to the application point and are able to get satisfactory results. This practice depends on the destruction of unstable crystals which have a lower melting point during the heating period just before application. Stable crystals do not melt under these conditions, so that some stable seed is left for use as a proper foundation in the final set.

The actual means which are employed to create a seed of stable crystals is unimportant as long as the prin-

ciple is applied to form and distribute as many stable seeds as possible and to prevent the formation and distribution of unstable seed crystals. Having established in the chocolate a sufficient number of stable seed crystals, the next problem is to apply this chocolate to centers without destruction of this seed and then to freeze the chocolate in its new position. The technical skill to accomplish this has been developed by every experienced enrober man. However, in some instances, the significance of the temperature of the centers is not thoroughly understood. When a relatively small amount of chocolate is applied to a larger bulk of centers an equalization of temperature begins to take place. Measurements with thermocouples have indicated that within 45 seconds after application the chocolate has acquired the temperature of the centers. In most cases this happens before the coated piece enters the cooling tunnel. In view of this, serious consideration must be given to controlling the temperature of centers if uniform results are to be obtained in any enrober operation. If the center is too warm, we are not taking advantage of the means of removal of heat from the chocolate. If the center is too cold, we not only may be increasing our rate of heat removal above the safe limit, but we are inviting trouble due to later expansion of the center when equalization takes place. Experience shows that 75° is a satisfactory temperature for cream centers, but some modification of this is desirable with other types.

The coated piece now enters the cooling tunnel in which suffcient fat must be crystallized to make possible the removal of the frozen piece from the belt and its transfer to a package. The function of the cooling tunnel is to remove not only the sensible heat, but enough of the latent heat of fusion to accomplish this result. The construction of a satisfactory tunnel is not merely a matter of simple engineering design. The engineers who design the tunnel must be aware of the limitations which exist in the rate of removal of heat from coated centers. An engineer can provide means for removal of heat by "brute force" or the employment of a drastic temperature deferential. If this is done and if we remove heat faster than crystallization can proceed normally, it is inevitable that new nuclei of unstable crystals will be started in the mass of chocolate. I am often reminded of advice given by an old time European chocolate man who said, "never frighten the chocolate". For this reason it is advisable to design the tunnel so that the air flows counter-current to the movement of the candy. This provides the lowest temperature deferential at the entering section so that the rate of removal of heat is less at first, but is increased as the material passes through the tunnel. The actual temperatures employed are determined by the length of the tunnel, the speed of the belt, and the amount of chocolate passing through in a unit time.

Another factor is the degree of tempering which has been accomplished before the chocolate is applied. A greater number of stable seeds will permit the more rapid removal of heat.

There are no hard and fast rules regarding temperature and time. These elements must be worked out to suit the particular conditions which have to be met. Even though the emerging chocolate may appear to be completely solid and dry to the touch all of the fat has not crystallized in the cooling tunnel. Calorimetric measurements which were made during a series of tests indicated that 85 percent of the crystallizable fat must be crystallized to obtain a product which has a lasting gloss. The remaining fat will crystallize if the finished piece is

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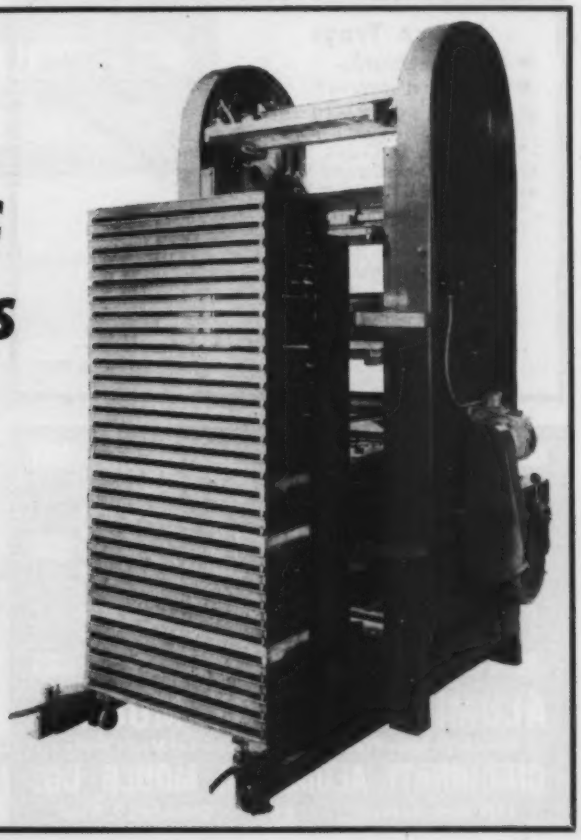

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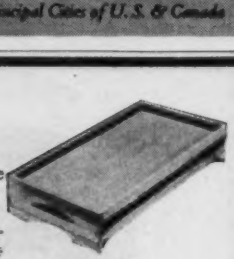

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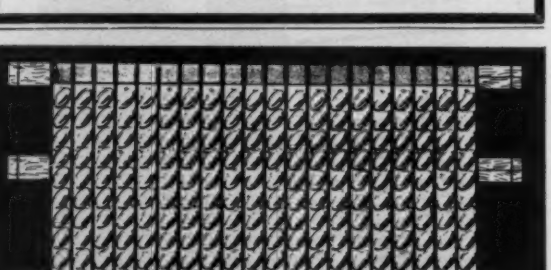

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stored in rooms where the temperature is maintained below 68°, but at least 24 hours is required to accomplish this.

Many people do not realize that the proper storage of candies removed from an enrober belt is an important part of the entire process of obtaining complete crystallization of fat.

If we have lived up to the principles in applying our chocolate, we will have an end product which will have maximum shelf life and resistance to bloom. Many times however, we take short cuts and wonder why there is a loss of gloss on storage or actual appearance of fat bloom. It would be well to consider again the forces of nature which are responsible and the mechanism through which they work to create havoc in the finished piece of chocolate candy. While we do not understand all of the means by which bloom is produced, one is fairly obvious to us. If the finished coated piece contains a significant amount of unstable fat crystals when it is placed in the package, the internal stresses within these crystals will force a rearrangement to the stable form. As mentioned before, this rearrangement is accomplished by the release of the remaining latent heat of fusion. When this occurs in a confined space, the actual temperature of the chocolate is increased, because the dissipation of this heat is retarded by the surroundings. It is easy to see that the lower melting fractions of the cocoa butter together with any remaining unstable crystals can be actually melted by this release of heat and the resulting liquid fat is forced to the surface by the forces of capillary attraction. When the temperature reaches equilibrium, recrystallization takes place in the form of a film of very tiny crystals on the surface of the coating, which we normally call fat bloom. Even a small film will destroy the gloss and appearance of the chocolate.

Conventions -- Meetings

Apr. 3-5—American Management Ass'n Production Conference, Hotel Statler, New York.

Apr. 15-24—International Fair, Lyons, France.

Apr. 24-26—American Management Ass'n Packaging Conference, Navy Pier, Chicago.

Apr. 27-28—Pennsylvania Manufacturing Confectioners' Ass'n 4th Annual Production Conference, Lehigh University, Bethlehem, Penna.

May 6—Gopher Candy Club, 13th annual Friendship Dinner, Radisson Hotel, Minneapolis, Minn.

May 7-10—Flavoring Extract Manufacturers Ass'n of the U.S. 41st Annual Convention, Hotel Traymore, Atlantic City.

May 13-19—Paris International Trade Fair, Paris, France.

May 21-25—Institute of Food Technologists Decennial Conference, Edgewater Beach Hotel, Chicago.

May 22-24—American Management Ass'n Insurance Conference, Hotel Statler, New York.

May 31-June 3—National Candy Wholesalers' Ass'n 5th Annual Convention and Exposition, Commodore Hotel, New York (tentative).

June 1-2—American Management Ass'n General Management Conference, Waldorf-Astoria, New York.

June 4-7—Associated Retail Confectioners of the U. S., Commodore Hotel, New York.

June 4-9—National Confectioners Ass'n., 67th Annual Convention and 24th Confectionery Industries Exposition, Waldorf-Astoria and Grand Central Palace, New York.

August 6-9—27th annual convention, Southern Wholesale Confectioners' Ass'n, Inc., Birmingham, Ala.

Sept. 18-23—Third International Congress of Chocolate and Cocoa Manufacturers, Lausanne, Switzerland.

Candy Equipment Notes

• **Minneapolis-Honeywell Regulator Co.** has named Lloyd E. Slater industry manager for the food field, it is announced by L. Morton Morley, vice-president and general sales manager.

• **John Sheffman,** New York, is named national representative by Hontz Machine Works, Inc., in announcement by H. E. Hontz of the firm's new automatic chocolate peanut cluster machine. Production of 600 to 900 pieces a minute on the 24-inch machine is reported. The fully automatic machine is made of aluminum and requires only the attention of the enrober operator to supply peanuts and chocolate.

The machine consists of a hopper in which the dry roasted nuts are visible through a glass gauge. The nuts are delivered through a multiple measuring valve to perforated aluminum retaining ring groups on an endless chain passing through the enrober, where the nuts are coated with chocolate, and are released in cluster form on the cooling belt. The machine will also handle filberts, cashews, almonds, etc., and raisins.

Due to the short space of time between the coating of the peanuts and the cooling of the coating, the nuts retain a crispness that is often lacking in coated nuts mixed with warm chocolate for a period of time before they are formed into clusters.

A sensitive thermostatic control is built in to insure constant temperature through means of electric heat to keep the nut retainer groups at the proper warmth. This releases the clusters cleanly and prevents chocolate from accumulating on the retainers.

The peanut cluster machine, though operated as an independent unit with built in motor, is easily

PRODUCTION OF 600 to 900 pieces a minute is claimed by the Hontz Machine Works, Inc., of their new 24-inch automatic chocolate peanut cluster machine. H. E. Hontz, head of the firm announces the appointment of John Sheffman of New York City as national representative.

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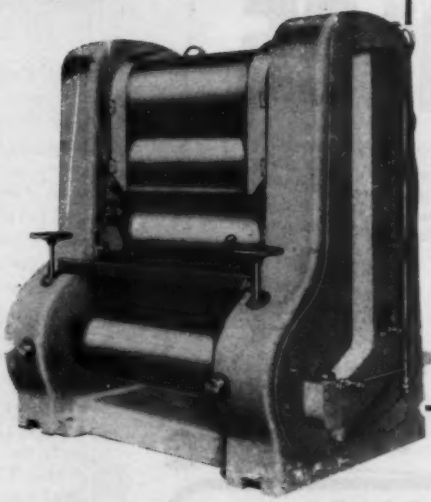

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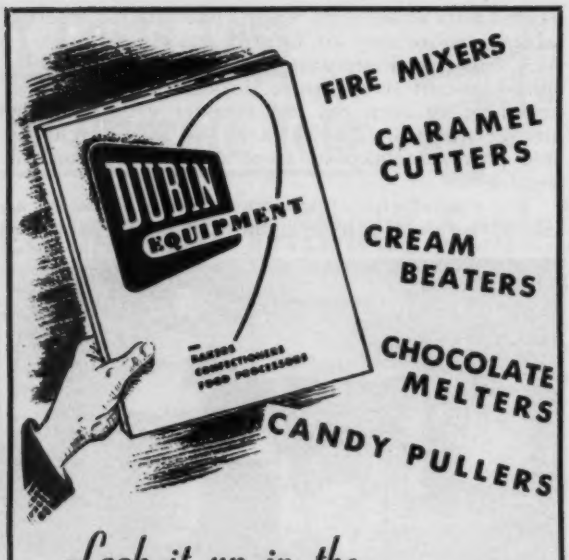

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synchronized to any enrober speed by a variable speed drive to any capacity to which the enrober can produce.

The machine does not tie up the enrober to the production of peanut clusters alone. Provision is made so that the machine may be quickly and easily raised by a cam and lever arrangement so that the enrober may be used for the coating of other goods.

• **Triangle Package Machinery Co.** announces the appointment of Gilbert D. Kline in charge of sales and service scheduling, headquartering in the firm's new Eastern sales office located at 50 Church Street, Room 351, New York City.

• **Minneapolis-Honeywell Regulator Co.'s** industrial division has named K. R. Knoblauch manager of sales of valve products, it is announced by L. M. Morley, Honeywell vice-president and general sales manager of the firm's industrial activities.

• **Pulva Corp.** recently announced the appointment of Ferdinand Kolisek, formerly with Pulverizing Machinery Co. for 13 years, as secretary and treasurer of the recently formed Pulva firm.

• **Packaging Machinery Manufacturers Institute** will hold its semiannual dinner on Monday evening, April 24, at the Sheraton Hotel, Chicago, with G. Radcliffe Stevens, Elgin Manufacturing Co., as chairman of the program committee. Assisting Mr. Stevens are: Charles L. Barr, F. B. Redington Co.; John P. Corley, Miller Wrapping & Sealing Machine Co.; Ben C. Lewis, Peters Machinery Co.; Louis R. Muskat, Triangle Package Machinery Co.; and I. H. Risser, U. S. Bottlers Machinery Co.; all of Chicago.

A Committee on foreign trade has been appointed by Wallace E. Coughlin, president of the Packaging Machinery Manufacturers Institute, to assist members engaged in foreign trade. John M. Chalfant, export manager, Package Machinery Co., is chairman. The committee includes: Bryant W. Langston, Samuel M. Langston Co.; Louis R. Muskat, Triangle Machinery Co.; and Herbert H. Weber, H. G. Weber & Co.

• **Dollar Sales of Candy in 1949** dropped about 12 per cent from 1948, reports the Bureau of the Census. Volume of 302 reporting firms for 1949 was $704,601,000. For 117 firms reporting both volume and poundage, dollar volume was down 14 per cent from 1948, and poundage was off 1 per cent. Package goods was down 5 per cent, bar goods 14 per cent, bulk good 20 per cent, general line 13 per cent, and unclassified items 17 per cent. For January of this year, bar goods were reported down 7 per cent from January, 1949, bulk goods down 20 per cent. Sales of packaged goods were reported "about the same."

• **Sugar Deliveries to the Confectionery Industry** totaled the equivalent of 12,746,006 100-lb. bags, reports the Production and Marketing Administration of the U. S. Dept. of Agriculture. This includes: 6,892,590 100-lb. bags of cane refined, 2,658,427 100-lb. bags of beet sugar, 1,891,026 100-lb. bags imported (includes delivered for direct consumption without further processing), and liquid sugar in the equivalent of 1,303,963 100-lb. bags. The industry also purchased 277,273 100-lb. bags of dextrose.

Confectioner's Briefs

• Persons • Plants • Promotions

• **E. J. Brach & Sons** has purchased a 750 by 350 foot site at Chicago Ave. and Pulaski Rd., in Chicago, recently from the Chicago and North Western railroad for $196,000. Edward M. Kerwin, vice-president of the Brach firm, said the company will erect a multiple story warehouse on the site.

• **Paul F. Beich Co.'s** sales manager, Charles J. O'Malley, has joined the Olian Advertising Co., Chicago, as a vice-president. Mr. O'Malley had been with the Beich firm for over 15 years.

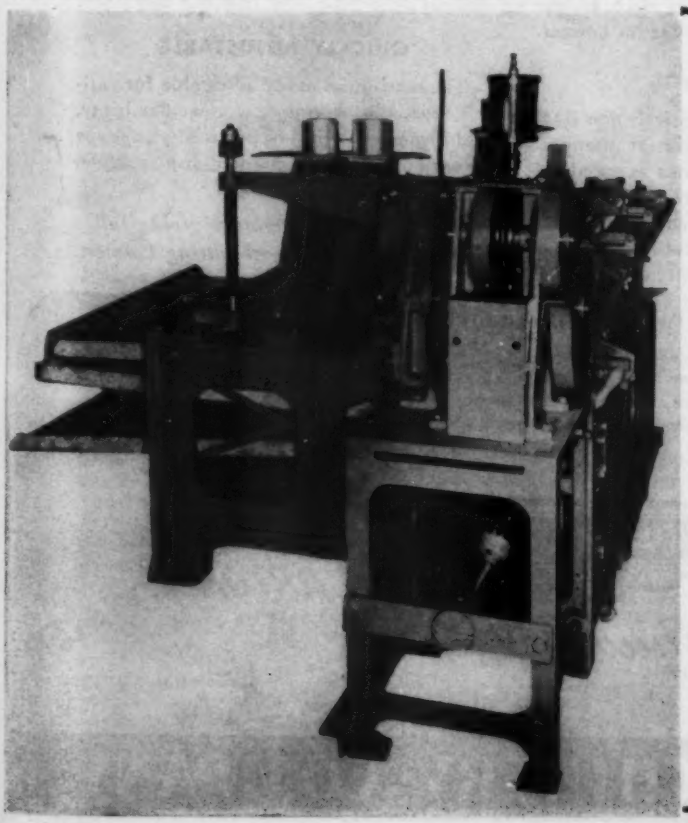
• **Devonshire Cream Mint Co.,** of Philadelphia, recently appointed Charles K. Kamsler sales manager. Mr. Kamsler was formerly with Dunnie Shewell, Inc., Philadelphia.

• **The Western Confectioners and allied trades** meeting place of the 1950 convention has been changed to the Hollywood Roosevelt Hotel, Hollywood, Calif. Date of the convention remains unchanged, April 17-18. Philip P. Gott, NCA president—reporting on association affairs, the tax situation, and allied subjects—will be a major speaker. A revised panel of regional chairmen follows: Reed Robinson, Golden Nugget Sweets, Ltd., San Francisco, for Northern California; Ben Meyerson Candy Co., Los Angeles, for Southern California; Cecil McKinstry, Imperial Candy Co., Seattle, for the Pacific Northwest; Jack Sweet, Sweet Candy Co., Salt Lake City, for Utah and the Rock Mountain area.

• **Confectionery and Restaurant Division** of the Cardinal's Committee of the Laity, soliciting contributions on behalf of New York Catholic Charities, has named the following to the committee; John H. Murray, Frank G. Shattuck Co., chairman; John T. Collins, Automatic Canteen Corp.; Gerald Shattuck, Frank G. Shattuck Co.; Augustin S. Hardart, Horn & Hardart Co.; George T. Herald, Sero Syrup Co.; John G. Shattuck, Frank G. Shattuck Co.; and John Morris, American Chicle Co. as vice-chairmen.

• **Delson Candy Co.'s** President Charles R. Adelson recently returned with Mrs. Adelson from a two-month trip abroad. They visited Lisbon, Portugal, Madrid, and Toledo in Spain; a number of cities in Italy; and returned through Switzerland

(*Please turn to page* 68)



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Even if you are now using folded blanks set up by hand, the Palmer will show substantial savings on both material and labor.

QUICKLY ADJUSTABLE

The machine is easily adjustable for various sizes, thus giving you great flexibility, and it can be adapted to practically any type of carton, including counter display types.

Write today for literature giving full information on the cost-cutting Palmer.

PACKAGE MACHINERY COMPANY • PALMER DIVISION
Springfield, Massachusetts

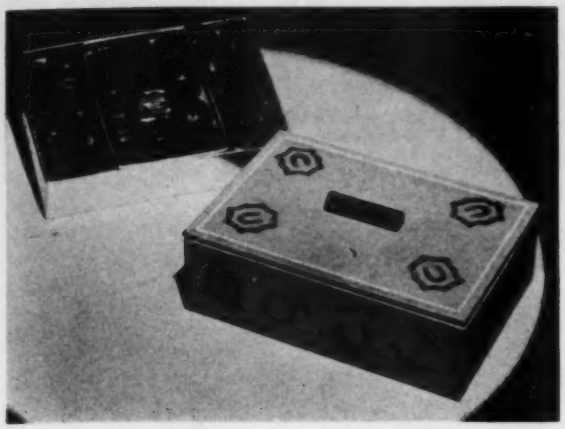
NEW YORK CHICAGO BOSTON CLEVELAND ATLANTA
DALLAS DENVER LOS ANGELES SAN FRANCISCO
SEATTLE TORONTO MEXICO, D.F.

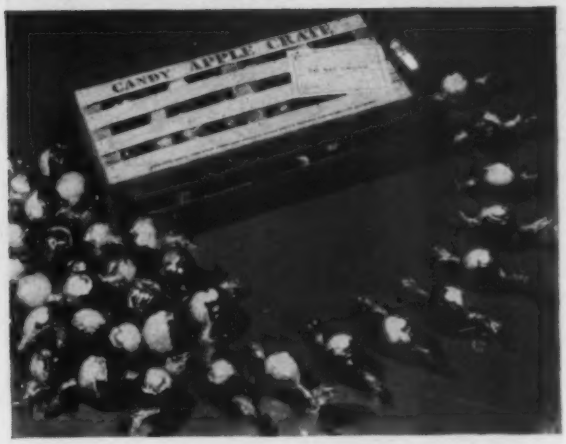
PALMER

Continuous Motion CARTON FORMER

PACKAGE MACHINERY COMPANY

NEW "BAR B" candy package of Barricini Candies, Inc., shown below, hinges appeal on constantly increasing interest in dude ranches and in ranch life. Planned as a sturdy, expensive-looking gift item, leatherette "Bar B" box also stresses reuse value in home.





CANDY APPLES BY the crate is new packaging idea created by Overland Candy Co., a division of Leaf Brands, Inc. Candy apples, individually cellophane wrapped, are packed in miniature die-cut replica of real fruit crate, which is printed to look like real board.

"FLASH APPEAL" candy packages — identify and sell at a glance

by **CLYDE C. HALL**
The Manufacturing Confectioner

FLASH APPEAL—"THE ability of a package to identify and sell itself at a moment's glance"—is one of the great lessons learned by Britain's 13-man "productivity team" of packaging specialists in a 25-day study of 52 American packaging plants, reported George Ashwell, head of the British mission, at a New York press conference just before the team's recent return to England. America's package designers, Mr. Ashwell also noted, are both salesmen and artists. And Dr. George Riddell, research director of the Printing, Packaging, and Allied Trades Research Ass'n estimated there is about 10 times as much packaging research conducted in this country—especially by smaller package users and supply firms.

Packaging Exposition

As U. S. candy packaging and other industry packaging executives prepare to attend the estimated 140,000-sq. ft. 19th National Packaging Exposition, at Chicago's Navy Pier, April 24-27, the latest candy packages continue to indicate the industry's resourcefulness in introducing "flash appeal" packages combining salesmanship, artistry, and research.

Crated Candy Apples

Candy apples by the crate are a new packaging idea created by Overland Candy Co., a division of Leaf Brands, Inc., Chicago. A die-cut replica of a real fruit crate is used to hold the bright yellow and red candy apples, which are individually cellophane wrapped. Printing makes the candy apples' crate look like real board, and the slats of the crate permit visibility of the apples. A special shipping label adds to the realistic effect and helps make the package a natural gift item.

Dude ranches and ranch life provide the motif for the new "Bar B" candy carton of Barricini Candies, Inc., Long Island City, N. Y. Intended also as a sturdy, expensive-looking gift item with reuse value, the pound "Bar B" box is made of patented laminated boxboard blanks covered with leatherette printed with famous ranch brands. The box has a take-off lid which has a

NEW ELONGATED LUCY ELLEN bar, left, is developed to meet requirements of vending trade and is reported winning enthusiastic acceptance. New wrap is cellophane printed in yellow, red, brown, and white.

COUGH DROPS IN cellophane bags are being introduced by Harry H. Wike Co., Lancaster, Penna. "Serv-O" bag feature enables bag to be opened and closed with ease. Four-color printed bags keep out air, eliminate stickiness.

wooden handle and saddle stitch trim. A candy-fitted tray with a clear cellophane overwrap fits into the box. Manufactured for Barricini Candies by Robert Gair, Inc., the "Bar B" is planned for the low price range. Barricini's chocolates are sold exclusively through the Barricini chain of shops in metropolitan New York. The firm also does an extensive mail order business in the U. S. and abroad.

New Elongated Bar

The new elongated "Lucy Ellen" chocolate cream and toasted almonds bar, which was developed to meet requirements of the vending trade, features a new wrap, too. Measuring 4 x 1½ x ⅝ inches, the new bar is wrapped in cellophane printed by Milprint, Inc., in yellow, red, brown, and white. It is packed in cartons of 150 bars each. "Acceptance of this new elongated bar," says Lucia Harshman, manager of Lucy Ellen Candies Division, Community Industries, Sullivan, Ill., "is very enthusiastic, and we are preparing to test this new size in regular 24's pack with the wholesale trade in several areas in order to determine its acceptance on the retail counter in comparison with the original 'Lucy Ellen' bar, which has always been square in shape and foil wrapped."

Cough drops in cellophane "Serv-O" bags are being introduced by the Harry H. Wike Company, of Lancaster, Penna. Attractively designed and printed in four colors, the bag keeps the drops fresh by preventing entrance of air and eliminating stickiness. An important feature, as the drops are not completely consumed at one time, is the easy opening and closing construction. This is achieved in much the same way as making a cellophane tape closure. The design is also planned to effect ready product visibility and manufacturer identification.

With lollypops a new item for the Ashby Candy Company, of Milton, Penna., the firm utilizes the advertising potential of a printed corrugated shipping container. Approximately the same design as that on the eight filled boxes of pops inside, the design of the new container for Ashby's "Zum-Bo" pops features a boy holding a handful of pops (and eating one). Copy reads: "The Lollypop with the full fruit flavor and safety stick." Printing is in red.

Candy Packed in Water Bucket

A standard 10-quart galvanized water bucket is used by Spangler Candy Company, of Bryan, Ohio, to add customer appeal to its recently introduced two-for-a-penny bright red sanded marshmallow strawberries in its group of premium promotional packs. A three-box pack, 720 count, is packed in the galvanized bucket. An individual shipping carton is used for each bucket. "In view of the approaching Summer season, of marshmallow, this item offers extra special appeal," says T. R. Spangler. "The berries are bright red in colored sanding sugar with a few green numbers added for extra eye appeal. The center of each piece is a grained marshmallow consistency with strawberry flavoring. The deal bears a card saying, 'Last purchase receives this water pail free' for extra promotional value. The water pail, representing a 75-cent value at the retail level, is an especially good sales inducement."

A new style 3-pound glass decanter for the "Sunbrite Candies" of Thinshell Candies, Inc., of Chicago, is also reported winning immediate acceptance because of its reuse value and gift package appearance.

Variety Merchandiser Clinic

Of importance to candy manufacturers seeking the mass selling opportunities of "super" stores, discussions at the recent Variety Merchandiser Clinic in New York's Hotel Statler emphasized the need to follow the current strong style trends found in all branches of mass retailing, supermarkets included. Teaming up style with price in the "five and tens" for maximum sales in today's style-conscious retail market was also urged.

"The open counters of the variety store are taking a poll of public opinion every minute." Victor Lebow, marketing consultant, told 600 executives at the clinic. "As I see it, he said, "marketing is actually concerned with the public relations of commodities. There are ways of influencing public opinion. Price is one of them. Style is another. Keep in mind that, in these wider fields into which the variety stores—particularly the "super" stores —are moving today, style is often the chief justification of price. And as the variety stores depend upon their larger share of their volume, both the variety stores and the manufacturers who serve them must be increasingly concerned with the style factors in product, package, and promotion."

Does your package make their eyes POP?

Funny how a child's eyes light up when he sees a good-looking package. Like grownups, he too, figures it must be just as good to eat. And what a whale of a lot that has to do with the sale.

Attractive packaging is not solely confined to a smart, colorful wrapper. It takes machines—like Lynch Wrap-O-Matics—to provide neat, thoroughly sealed packages and turn them out fast enough to provide wrapping economy and speedy marketing. Write for details on how Wrap-O-Matics can put your packaging on the profit side.

SEE LYNCH
PACKAGING MACHINES
IN BOOTH 234
National Packaging Exposition
April 24-27
Navy Pier, Chicago

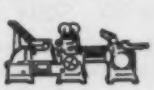
PAR AIR COMPRESSORS

PAR REFRIGERATION COMPRESSORS

WRAP-O-MATIC CANDY & COOKIE WRAPPING MACHINES

LYNCH
CORPORATION
PACKAGING MACHINE DIVISION
TOLEDO, OHIO

MORPAC PAPER PACKAGING MACHINES



MORPAC BUTTER & OLEO CARTONING MACHINES

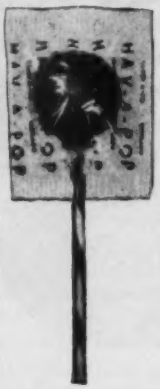
GLASS FORMING MACHINES

DAVIS COUNT-O-MATIC
(ACCURATE MECHANICAL COUNT)

Pop-Wrap Machine
U. S. PATENTS 2-486-736-759-760-761-782

$1,500 — Complete
(F.O.B., AKRON, OHIO)

Tremendous Savings in Labor . . . Materials



Speeds Production . . . Does a Better Job

THE MOST AMAZING improvements ever devised in a pop-wrap machine . . . now offered for the first time at a cost so low you can well afford to replace obsolescent or less efficient equipment. The greater production and the savings in labor costs, materials and maintenance will pay for the new equipment within a few months. After that, the savings represent clear profit.

TWO GIRLS CAN LOAD STORAGE BIN, WRAP, BOX AND CARTON (EITHER 80's OR 120's) 40,000 LOLLYPOPS IN EIGHT HOURS, AT AN AVERAGE LABOR COST OF ONLY $12.00 BASED ON $.75 HOUR RATE. ONE MANUFACTURER USES THREE GIRLS AND WRAPS 72,000 LOLLYPOPS IN 8 HOURS.

CHECK THESE FEATURES

1—Saves 20% to 30% in labor costs

2—Uses only 12½ sq. in. of cellophane per average pop . . . a potential saving of $1000 to $2000 per year on cellophane for each million pops per month.

3—Pop count is mechanical . . . automatic. No need to weigh or hand count.

4—Each pop is heat-sealed in fine-line-jewelry-crimped cellophane; minimizes tendency to "sugar-off".

5—Adaptable to all shapes of pops, all types and lengths of sticks. Floor space required, only 3 x 12 feet (without loading bin).

6—Maintenance cost, not over $60 per year. Simple to operate.

Get all the facts about this better new low cost—automatic count pop-wrap machine.

WRITE TODAY TO:

CEL-O-CORE

624 South Michigan Avenue, Chicago 5, Illinois

FACTORY: AKRON, OHIO

Manufacturers of COLORFUL, SOLID CELLOPHANE LOLLY-POP STICKS—U. S. Patent No. 2,488,272

Confectioner's Briefs

(Continued from page 63)

and Southern France, spending a week each in Paris and England. They were present for the opening of Holy Year and had an audience with the Pope in Rome.

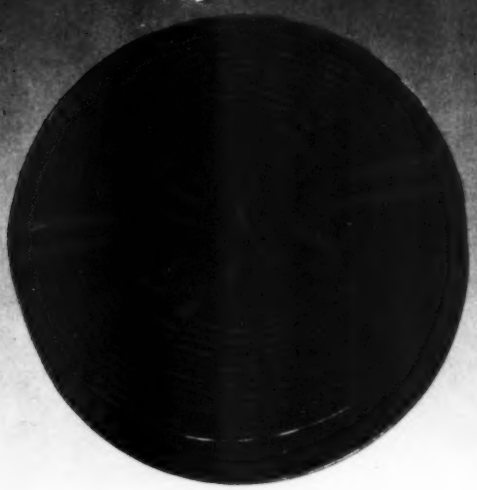
• **Beech-Nut Packing Co.,** and subsidiary's net income for 1949 was $4,353,068, equal to $2.84 a common share, compared with a net of $5,557,073, or $3.63 a share for 1948.

• **Henry Heide, Inc.,** is using 24-sheet billboard advertising which ties the mid-century anniversary of publication of New York's nostalgic ditty "The Sidewalks of New York to Heide's "Assorted Jujubes" and "Licorice Pastilles." Both candies have been on the market for more than 50 years. Heading of the poster reads: "New York Favorites for over 50 Years."

• **Macy's "Joyva Halvah Festival,"** originally scheduled for one week, occasioned so unprecedented a demand recently for the vacuum tins of Joyva that the New York store continued the demonstration for another week. Sales during the second week surpassed even those of the preceding week, it is announced. A "Joyva Sultan" and a "Joyva Girl" distributed samples to shoppers in the Grocery deperatment and one out of three persons taking a sample bought a can of "Joyvah" halvah, it is reported. Large scale advertising and publicity promotion was carried on in conjunction with the festival. Earl K. Angstadt is candy buyer for Macy's. Robert Nicholas is grocery buyer. A wide scale demonstration and sampling setup is being arranged by Joyva as a result of the successful promotion at Macy's.

CURTISS CANDY'S Les Kellough (left) has H. A. Downey (right), general sales manager, contribute a dollar to March of Dimes recently at a sales meeting held in Chicago. Each of the sales managers attending the meeting were given a coconut to carry wherever they went. A contribution of a dollar to the March of Dimes had to be paid by anyone walking off without his coconut. Hildegarde Kohring (center), a polio victim at the age of two, was in charge of the collections.

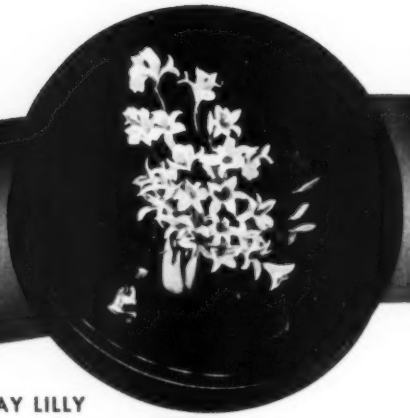
Stars of THE CONTAINER FIELD



we invite you to see for yourself

appealing

KITTEN



DAY LILLY

distinctive

WINTER

IRIS

CAMEO

practical

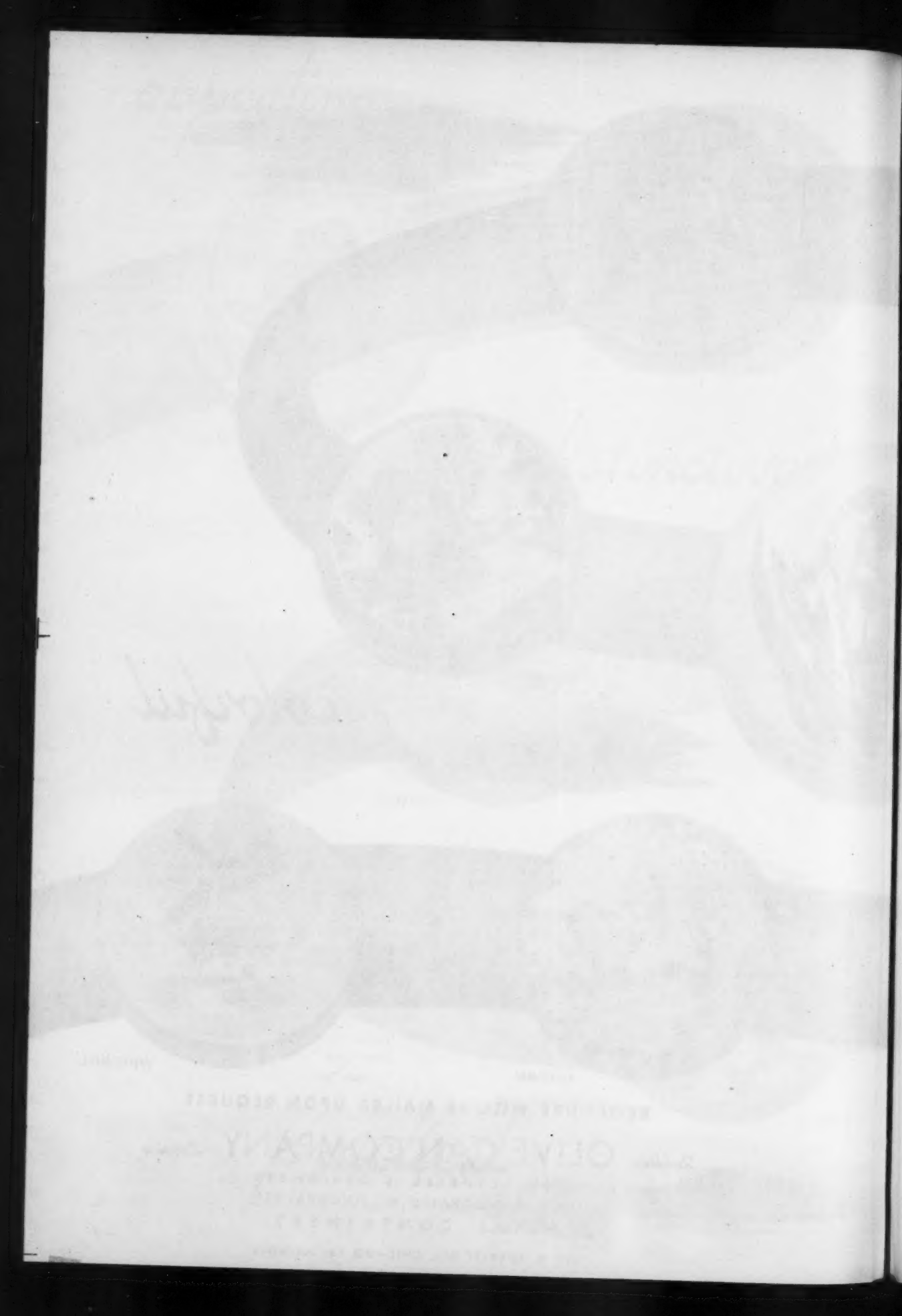
colorful

BROCHURE WILL BE MAILED UPON REQUEST

Quality OLIVE CAN COMPANY *Service*

MANUFACTURERS • DESIGNERS
PLAIN • DECORATED • LITHOGRAPHED
METAL CONTAINERS

450 N. LEAVITT ST., CHICAGO 12, ILLINOIS



• **Brock Candy Co.,** Chattanooga, debuts its "Brock Bar Ranch" program April 1 over 40 CBS stations in 13 states. The weekly program will be heard Saturdays from 7 to 7:30 p.m. and is believed to be the first time a Chattanooga manufacturing plant or commercial enterprise of any type has contracted for a continuous radio advertising program on a national hookup. In a preview of the program, "Sunshine Sue" who is "femm-cee," was introduced to Brock employees. W. E. Brock, Jr., president, was master of ceremonies for the preview. Sen. W. E. Brock, company founder, and other members of the Brock family were also present. A recording of the preview was made in the plant and scheduled for April 1 over WDOD, local CBS station.

• **Robt. E. Thyr & Co.:** Aquisition of four new lines is reported by R. E. Thyr and H. A. Stewart partners in Robt. E. Thyr & Co., candy brokers located at 202 Davis street, San Francisco, Calif. The lines and states in which the concern will handle sales are: Kimbell Candy Co., Chicago, in the 11 Western states; Flavour Candy Co., Chicago, in California, Nevada, Utah, Wyoming, and Colorado; M&M's Panned Confections, manufactured by M & M, Ltd., Newark, in Oregon, Washington, Idaho, Montana, Colorado, Utah, and Nevada.

• **Barton's 28 Stores** in New York featured these "New! . . . for Purim" items: (1) "Chocolate Hamantashen (Parve)," made of chocolate coconut, filled with raspberry fruit, and sold in a "gay Purim gift box" of 10 for $1; (2) "Purim Chocolate Assortment (Parve)," a chocolate assortment in a "box with a lovely Purim design and 'Happy Purim' message," which sold at 1 pound for $1.59 and 2 pounds for $3.18; (3) a 50-cent "Shalach Manot" gift box for the kiddies, with "Grager" and "Chocolate Hamantash," golden chocolate coins, "Aleph-Bet" chocolate bar, and fruit candies; (4) a $1.44 box of 12 "Aleph-Bet" bars made of Swiss milk chocolate, "each square with a Hebrew character."

• **American Chicle Co.,** reports net profit of $4,488,228 or $3.46 a share, after inventory reserve of $186,777, for 1949. Net profit for 1948 was $4,869,710, or $3.75 a share. Net profit for the fourth quarter was $1,235,698, or 95 cents a share, against $1,220,334, or 94 cents a share in the like period of 1948.

• **The Council on Candy of the National Confectioners'** Ass'n., according to Paul M. Beich, president of the Paul F. Beich Co., and council chairman, concluded at a special meeting of members recently, that scientific research into the causes of tooth decay appears to have numerous contradictory aspects and this perplexing problem seems to remain "highly controversial." The meeting was called, Mr. Beich said, to bring about a wider understanding of this matter in the industry with particular reference to the position of refined sugar, candy, ice cream, cereals, and other carbohydrates in the study of tooth decay.

• **Bell Sales Co.,** San Francisco, headed by C. K. Bell, recently acquired three new accounts. The concerns and products, which the Bell firm will represent in Northern California, are: Olin Manufacturing Co., Oakland, manufacturers of "Corn-

At Your Finger Tips

TECHNICAL INFORMATION

For Every Candy Library

A good candy library will effectively answer ever-occuring technical questions with instant, complete satisfaction. Let the experts work for you. Turn their knowledge into greater profits for your firm. The books listed here are carefully selected to help make your candy library an authoritative, finger-tip source of profit-making, time-saving technical information. For your convenience, you may order any book by number—just mention the issue in which this list appears.

1—Chemical Formulary, Volume VIII
Edited by H. Bennett, F.A.I.C. $7.00

2—The Trade-Mark Act of 1946
By Harry A. Toulmin, Jr. $5.00

3—Confectionery Analysis and Composition
By Dr. Stroud Jordan and Dr. K. E. Langwill ..$3.50

4—Glycerine
By Georgia Leffingwell, Ph.D. and Milton A. Lesser, B. S. $5.00

5—Candy Production: Methods and Formulas
By Walter Richmond $10.00

6—Soybean Chemistry and Technology
By Klare S. Markley and Warren H. Goss $3.50

7—Spice Handbook, The
By J. W. Parry $6.50

8—Introduction to Emulsions
By George M. Sutheim $4.75

9—Chemical Composition of Foods, The
By R. A. McCance and E. M. Widdowson $3.75

10—Food Products
By Saul Blumenthal $12.00

11—Chemical and Technical Dictionary
Edited by H. Bennett $10.00

12—Air Conditioning
By Herbert and Harold Herkimer $12.00

13—Food Regulation and Compliance
By Arthur D. Herrick $10.00

14—Practical Emulsions
By H. Bennett $8.50

THE MANUFACTURING CONFECTIONER 9 South Clinton St. Chicago 6, Illinois

Jiffy

INSULATED BAGS

Protect Chocolates from MELTING and CRUSHING

for CARRY-OUT

JIFFY INSULATED BAGS act as portable refrigerators between store and home. They protect chocolates from the summer heat —keep them looking store-fresh, regardless of the outside temperature.

for MAIL ORDER

As pre-packaging, JIFFY INSULATED BAGS protect chocolates from temperature variation and rough handling encountered in transit. The thick ¼" insulation of Jiffy Bags acts as an "expansion" cushioning, which absorbs all shocks and jars—eliminating crushing and chipping of chocolates.

Jiffy ORDER TODAY!

JIFFY MANUFACTURING COMPANY
360 FLORENCE AVENUE • HILLSIDE, N. J.

Western States Representative
RAY T EBERT COMPANY • P O Box 550 • Redwood City • California

nuts"; Tasty Candy products Co., N. Y., producing a line of penny suckers; and Lyon Packing Co., Fresno, putting out raisins in 1 oz. packs and raisins for the confectionery industry.

• **Frederick Brummer,** confectioner at 731 Grand St., Jersey City, N. J., died recently. He was a member of the N. J. Retail Ice Cream and Candy Manufacturing Ass'n.

• **New Candy Shops** recently established are as follows: Marshall's Sweet Shop, Inc., 852 Broadway, Bayonne, New Jersey; Plaza Candy Shop, 121 E. 59th St., New York City; Tudor City Bon Bonniere, 762 2nd Ave., New York City.

CENTRAL WEST candy manufacturers in cooperation with the Illinois Institute of Technology, are sponsoring an eight session course on the subjects of candy production techniques. Members of the sponsoring committee shown above are (seated, l-r) M. E. Parker, Illinois Institute of Technology; E. R. Bradley, Bunte Bros.; H. Knechtel, Marshall Field & Co.; and L. H. McClendon, Mars, Inc., chairman. Standing (l-r) A. Sisco, Sisco-Hamilton Co., Inc.; E. Shirrell, Curtiss Candy Co.; R. Maclean, Stevens Candy Kitchens, secretary; J. F. Hennessey, E. J. Brach & Sons; C. S. Brandenburg, Nutrine Candy Co.; and G. Lloyd Latten, Schutter Candy Co., Universal Match Corp.

• **Loft Candy Corp.** reports for the year ended December 31, 1949, total sales of $12,174,429 compared with $13,334,369 for 1948. The consolidated net profit after taxes and depreciation was $725,945, equal to 51 cents per share on the 1,400,000 shares outstanding, which compares with a net profit of $720,847, or 51 cents per share for 1948.

• **Circus Foods, Inc.,** San Francisco, increased sales 40 per cent during 1949 over 1948, according to the firm's financial report for that year. Net profits were $155,000. The company's 1950 advertising schedule, as reported by Edward H. Jenanyan, president, includes car cards, daily radio spots, and parts in several radio programs on a participating basis. The firm's latest item is a 6 oz. can of French fried almonds, which retails at 39 cents.

• **Nutrine Candy Co's.,** net sales in the year ended December 31, 1949, were $4,268,102 as compared with $5,685,848 in 1948, Neal V. Diller, executive vice-president, reported recently. Net earnings after provision for federal income taxes were $155,674 as against $467,914 the preceding year.

• **Peter Paul, Inc.,** has appointed Maxon, Inc., national advertising agency, it is announced by George Shamlian, president of the Peter Paul firm.

• **Rain Drops, Inc.,** 4030 S. E. Woodstock Ave., Portland, Ore., recently introduced "Oregon Rain Drops" to the Portland market. The product consists of roasted Oregon filberts in cordial, coated

the
EYE-APPEAL
of

STYRON
rigid containers

means
BUY-APPEAL
for your
confectionary
products

Fruit Cake Box: The lid is attractively designed and sturdily constructed to maintain freshness of contents. Transparency of lid exposes only the appetizing appearance of the fruit cake. Molded and distributed by Amos Molded Plastics, Edinburg, Indiana.

Candy Box: Re-use value of this rectangular box is high. The close-fitting lid has spring hinges which hold the lid either open or closed. Molded and distributed by Victory Manufacturing Company, 1722-1724 West Arcade Place, Chicago 12, Illinois.

ELIMINATE "long shelf life" with attractive, transparent Styron rigid containers. Utilize the new and greater merchandising opportunities of these handsome containers for volume sales of candy, fruit cakes, salted nuts, candied fruit and other foodstuffs.

Sturdy, economical Styron rigid containers stand out at the point-of-sale and offer your customers many advantages over the conventional cardboard containers. Important among these is the bonus value of RE-USE!

Low cost rigid containers made of Styron (Dow polystyrene) are available from qualified molders. They are molded in a wide variety of standard sizes and shapes or can be manufactured to meet your individual specifications. Plan to use these sales-compelling containers. Write to Dow today for complete information.

Plastics Division, Dept. SRC-15
THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN
New York • Boston • Philadelphia • Washington • Atlanta • Cleveland • Detroit
Chicago • St. Louis • Houston • San Francisco • Los Angeles • Seattle
Dow Chemical of Canada, Limited, Toronto, Canada

LOW COST PROTECTION
with
HIGH SALES APPEAL!

COUPON

The Dow Chemical Company
Plastics Division, Dept. SRC-15
Midland, Michigan

Please send me further information about Styron Rigid Containers.

Name_____

Company_____

Street_____

City_____ State_____

DOW plastics

in light and dark chocolate. Company officers are Jack Matlack, president; Walter Rothenberg, vice-president; James A. Mount, secretary-treasurer. The firm has appointed Pacific Nor'Westerners, Portland and Seattle brokerage concern, to direct national distribution.

• **All Barricini Stores** recently introduced "Barricini Maraschino Cocktail Cherries" in newly designed bottles. The Long Island City, N. Y., firm offers the item at 10½ oz. for 45 cents.

• **The Bunte Tangos TV Show,** "Cactus Jim," featuring Western movies is being telecast on station WNBQ. Chicago, every Wednesday from 5 to 5:30 p.m.

• **Pound boxes of See's Candy Shops,** San Francisco, are being awarded writers of the three best letters each week in the "Learn and Earn" children's feature of the San Francisco News "Mother Hubbard" club. Winners receive letters of identification from the paper, for presentation at any of See's candy shops or at the plant, 1750 Market St.

• **Philadelphia Chewing Gum Corp.,** is telecasting the "Mr. Magic" show over WPIX, New York, for its "Mystic Bubble Gum." Expansion of the program to other cities is also scheduled. Hundreds of boxes of the firm's "El Bubble Gum" are reported given away in a contest as part of the program. "KARE Bubble Gum," an ammoniated chewing gum, is also being introduced.

• **Hollywood Stars, Inc.,** 7020 Romaine street, Hollywood, Calif., recently opened sales offices at 383 Brannan street, San Francisco. Opening of the new sales offices marks the distribution of its product, a line of hard candy tablets retailing at 5 cents a roll, in Northern California. In charge of this territory is Inez E. Neubert. John T. Troll, Jr., son of John T. Troll Sr., of Troll's Mints, Los Angeles, is president of Hollywood Stars, Inc. Eight flavors are presently being manufactured: orange, lemon, lime, wild cherry, spearmint, peppermint, clove, and wintergreen. Coffee and butterscotch will be added at an early date, it is stated. Starting production about a year ago, the company, which sells direct to retailers, has coverage in the Southern California territory. Current plans call for extension of Western sales, to be followed by entry into the national market.

• **"Good and Plenty Candy"** is sponsoring Wednesday evening television of the "Lucky Pup," program featuring Doris Brown as narrator and the Bunin puppets Jolo, Foodini, and Pinhead.

• **See's Candy Shops, Inc.,** having opened eight new stores in San Francisco and bay region communities during 1949, now has a total of 32 in this area, reports Edward Peck, president of the company and general manager of the San Francisco plant.

• **Ernest Wilson,** San Francisco, taking up the sample pack idea, is introducing a duplicate of his colorful "Zombies" box, holding one piece, and retailing at 10 cents. Another new Wilson pack is "Special Selection," consisting of butter creams, marzipan, European chocolates, "Rare Bits," almond toffee and molded chocolates. The assortment retails at $1.25.

Give your Candy or other Confection "Buy Appeal" with "Eye Appeal"

CANDY packaging lends itself to the use of attractive, colorful, reuseable lithographed cans more than any other commodity. Heekin artists, Heekin lithographers and Heekin color experts work closely with manufacturers who pack their products in Heekin Lithographed Cans. Perhaps we can be of service to you.

HEEKIN *Beautifully Lithographed Cans*

THE HEEKIN CAN CO. CINCINNATI, OHIO

Supply Field News

• **Swift & Co.** completed transfer of four of its adhesive products department heads during March. H. A. Upton is made head of the adhesives department at San Francisco. He replaces R. B. Wright, who will become head of the adhesive department at Portland, Ore. H. B. Hunt, who previously headed the Portland department, becomes head of the adhesive products department at Kansas City. S. E. Carroll is transferred to the general adhesive products department in Chicago from Kansas City.

• **Chas. Pfizer & Co.**, Brooklyn, N. Y., recently promoted Robert H. Briggs to assistant general sales manager, Marshall N. deNoyelles to Eastern regional sales manager, and Richard Burnham to head the sales service department, it is announced by F. J. Stock, vice-president in charge of sales.

• **A. E. Staley Manufacturing Co.**, Decatur, Ill., has appointed two new representatives of the firm's industrial sales division. Paul H. Prentiss, 1608 Courtland Ave., Park Ridge, Ill., formerly with American Maize-Products, will work in Chicago and the Mississippi Valley states, and Ronald W. Murphy, 1248 34th Ave., San Francisco, formerly in the food brokerage business there, will cover the west Coast.

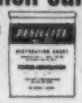
• **The Glidden Co.** shareholders elected B. W. Maxey, controller of the firm, a director of the company at the annual shareholders meeting in Cleveland recently.

• **Food-O-Mat Corp.**, has named William F. Dempsey president, it is announced by Lansing P. Shield, president of the Grand Union Co., which is the

LAND O'LAKES CREAMERIES, INC. conducts an annual efficiency contest among plant operators of its 22 plants in Minnesota and Wisconsin. First Prize winners for 1949 are shown above receiving their awards at the 29th annual meeting of the organization held in Minneapolis recently. Left to right are B. M. Zakariasen, chief chemist and director of field services; Victor Cross, manager of plant at Luck, Wis., roller process first prize winner; and Sig. W. Swanson, manager of plant at Sandstone, Minn. spray process winner.

will they love it in *December*

tho it's made in *May?*

Seasonal "peaks" no problem when candies are protected with Desiccite* 

CANDY MAKERS—Level out seasonal production peaks by manufacturing on an economical basis months ahead—then storing your candy economically with Desiccite #25—the drying agent that protects freshness, "dryness," flavor, and gloss from damaging moisture.

RETAILERS AND JOBBERS—For increased turnover and elimination of "returns," demand Desiccite-protected candy from your manufacturer—your displays and stocks will then be factory-fresh, dry, and glossy.

GET THE FACTS—*Write your nearest Desiccite distributor:* L. H. Butcher Co., Los Angeles, San Francisco, Portland, Seattle, and Salt Lake City; Eaton Chemical & Dyestuff Co., 1490 Franklin Street, Detroit; Prior Chemical Corp., New York City; Thompson-Hayward Chemical Co., main office in Kansas City, Mo., and branch offices throughout principal cities in central and southwestern states.

Dry pack with

DESICCITE #25

Desiccite manufactured by **FILTROL CORPORATION**

General Offices: 727 W. 7th St., Los Angeles 17, California

Plants: Vernon, California and Jackson, Mississippi

*T.M. REG. U.S. PAT. OFF.

For Better Packaging!

PARTITIONS

That Give Perfect Protection

•

LAYER BOARDS

BOATS **NECKS**

CHOCOLATE DIVIDERS

Reasonable Prices Assured

Prompt Deliveries Guaranteed

Immediate Attention Given to Requests for Estimates

Write, Phone or Wire for Quotations and Samples on Your Specific Requirements

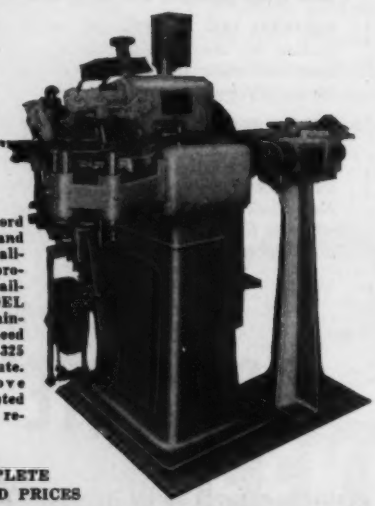
PETER PARTITION CORP.

19-21 HEYWARD STREET
BROOKLYN 11, N. Y.
Telephone: TRiangle 5-4033

IDEAL WRAPPING MACHINES

FAST-EFFICIENT-RELIABLE

CANDY manufacturers both large and small *prefer* IDEAL WRAPPING MACHINES because they provide the economies of fast handling along with *dependable, uninterrupted operation.* In use the world over, IDEAL Machines are building a service record that stands unmatched and unchallenged! Our unqualified guarantee is your protection. Two models available: SENIOR MODEL wraps 160 pieces per minute; the new High Speed Special Model wraps 325 to 425 pieces per minute. Investigation will prove these machines are adapted to your most exacting requirements.



WRITE FOR COMPLETE SPECIFICATIONS AND PRICES

IDEAL WRAPPING MACHINE CO.

EST. 1906

MIDDLETOWN, N. Y. U. S. A.

parent firm of this producer of the "Food-O-Mat" and "Drug-O-Mat." Mr. Dempsey is a former division general manager of the Grand Union Co., and has been connected with its store operations for over 20 years.

• **Clinton Foods'** Marvin Wallace joined Ira Mosher and a group of other industrialists at the Hotel Warwick, New York City, recently for the first of a series of meetings to study "employee benefits". Mr. Mosher, chairman of the National Ass'n of Manufacturers' Employee Benefits Committee, greeted Mr. Wallace as the delegate for Roscoe Wagner, vice-president and general manager of Clinton's Iowa operations.

• **Fritzsche Brothers, Inc.** announces Oil Black Pepper Imitation and Oil Cardamon Imitation, both of which represent scientifically correct reproductions of two very important and, at present, high priced seasoning oils.

Gustave A. Wohlfort, comptroller of the Fritzsche firm, was admitted to the company's Quarter of A Century Club at a dinner tendered in his honor recently at the New York Athletic Club. Mr. Wohlfort received a government bond from the officers and board of directors, a gold wrist watch from his fellow employees and a workshop jig saw from his department associates.

• **Lucian Bernhard Package Design Service,** established at 1 East 53rd Street, New York, is announced by Karl Bernhard, associate, to serve manufacturers, agencies, and packagers.

• **E. I. du Pont De Nemours & Co.** has appointed Arlington Kunsman as assistant general manager of the company's newly-created film department, it is announced by Donald F. Carpenter, recently designated general manager.

• **The National Peanut Council's** 10th Annual Convention and Peanut Industry Conference will be held April 20-21 at the Greenbrier Hotel, White Sulphur Springs, West Virginia. The NPC convention committee, responsible for the program, includes: chairman, W. T. Pond, Jr., Pond Brothers

(*Please turn to page* 80)

POLAK'S FRUTAL WORKS, recently made a record air shipment of 55 drums weighing 22,000 lbs. net and valued at more than $100,000, to South America. The firm has made many large shipments by air to all parts of the world, but the above shipment was the largest in the company's history.

LETTERS

(*Continued from page* 10)

when well mixed, add the flavor and powdered salt, and then add the Frappe. Continue to beat until the batch becomes plastic. The batch may be rolled at once by hand or allowed to cool at room temperature and formed by machine.

The frappe may be made as follows:

12½ lbs. corn syrup
12½ lbs. standardized invert sugar
½ lb. albumen dissolved in
1 lb. cold water.

Cook the corn syrup to 245 F. Remove from fire and add standardized invert. Place batch in a marshmallow beater; starting the beater, gradually adding the albumen solution and beating the batch until light.

The amount of coffee flavor to add will depend upon type of flavor used and also to the type of chocolate you are using for coating. It might be feasible to incorporate some coffee flavor in the chocolate coating. Caramel coloring may be used if desired to give a coffee color in the finished cream center.

Crystallizing Ginger and Kumquats

We would appreciate your sending us a formula for crystallizing Ginger as well as crystallizing Kumquats.
—Chicago

REPLY: Following is a formula for Glace Limes and Kumquats using fresh fruits that we suggest you try the following:

Soak fruit in cold brine overnight. (1 lb. salt to 1 gal. water). Next morning remove fruit from brine and prick ends of fruit with double needle (two needles stuck into end of stick).

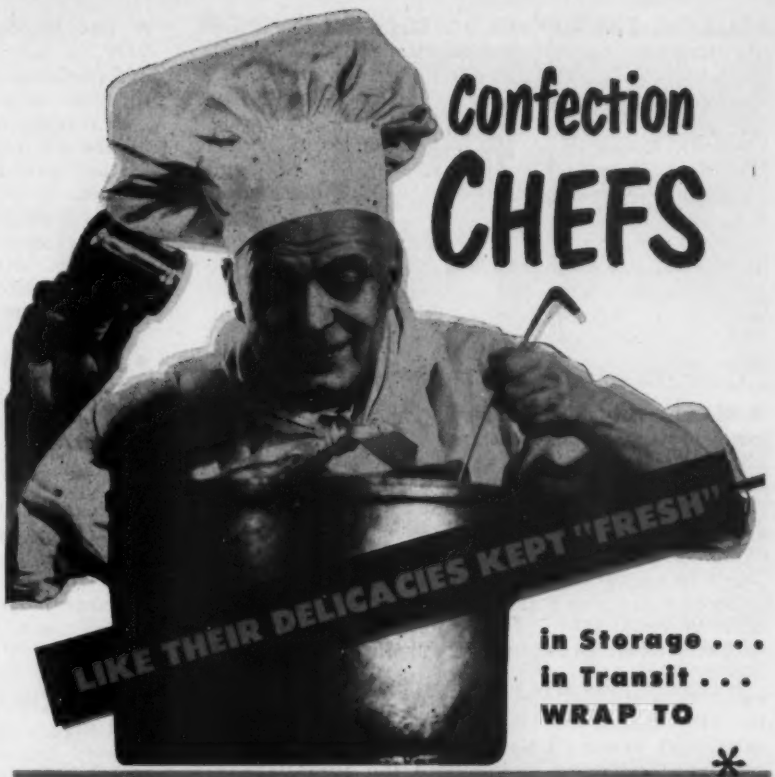
Fill kettle half full of cold water, add fruit, and bring to simmer. Remove fruit and place in cold water. Let stand until fruit is cold.

Place fruits in pots and add enough hot 24 degree Baume syrup (6 lbs. sugar, 4 lbs. corn syrup) to cover.

Next morning, place fruit and syrup in kettle and bring to simmer. Pour into pots and let set overnight.

Next morning strain off fruit and place syrup in kettle. Add a small amount of sugar. Cook to 26 degrees. Repeat process each day and raise cook 2 degrees until 36 degrees is reached.

The fruits can now be stored in pots or barrels, until ready to use.



in Storage . . .
in Transit . . .
WRAP TO

PROTECT WITH VAPOTITE*

PROTECT INDEFINITELY — HYGROSCOPIC FRUIT POWDERS ENCLOSED IN VAPOTITE.

RETAIN FLAVOR-FRESHNESS IN BULK PACKED CANDIES, POPCORN AND OTHER FOODS.

A MOISTURE-VAPOR SAFEGUARD

When a packaging requirement dictates the use of an odorless, non-staining, extra strong and tough moisture-vapor material — wrap to protect with VAPOTITE. Pliable, foldable and moldable, it retains its protective qualities even at extreme temperatures. Ideal for enclosures and case liners for candies, dried fruits, meats, cereals, food mixes, drink powders, drugs and hygroscopic materials. It is also available in various grades and custom-made types to protect such products as steel machine parts, sensitized papers, nursery stocks, electrical parts, etc. Thanks to VAPOTITE, food processors can now level out production curves by manufacturing months ahead of "peak" seasons. Write for samples and name of nearest distributor today.

Available in SHEETS ROLLS AND BAGS *Plain, Colored or Printed*

* *VAPOTITE has the advantages of a strong, sturdy laminated kraft, yet is more economical than most ordinary moisture-proof wraps.*

THILCO *Functional Papers*

THILMANY PULP & PAPER COMPANY • KAUKAUNA • WISCONSIN

Peanut Co., Suffork, Va.; William M. Birdsong, Birdsong Storage Co., Suffolk, Va.; W. W. Byrum, president, Albemarle Peanut Co., Edenton, N. C.; George F. Hartnett, George F. Hartnett & Co., Chicago; William K. Kuehn, president, Good Foods, Inc., St. Louis Park, Minn.; Homer G. Ray, Jr., president, Georgia Peanut Co., Moultrie, Ga.; and William P. Woodley, president, Columbian Peanut Co., Norfolk, Va.

• **Clinton Foods Inc.** has elected Allen T. McKay to vice-president of the corporation in charge of sales at its Juice Industries Div. offices, Dunedin, Fla., it is announced by Charles W. Metcalf, president.

• **Hershey Chocolate Corp.** earned $7,477,895 more last year than in 1948 despite a drop of almost 16 per cent in sales, the report of P. A. Staples, president, indicates. The result was attributable to lower material costs, mainly cocoa beans, which brought about an improved profit margin, and reduction in funds invested in year-end inventories. Net profit for 1949 was $15,481,242, after all deductions, equal to $6.15 a share on 2,311,295 common shares, in contrast to $8,003,347, or $3.27 each on 2,057,250 shares in 1948, when $4,107,089 was deducted for write-down of inventory to lower of cost or market. Net sales were $142,180,408 compared with $168,566,256 in 1948, "due in considerable measure to lower unit sales price to our customers," Mr. Staples said. The company continues to maintain the $6,000,000 reserve for future inventory price decline, which came out of 1947 earnings, rather than transfer it back to earnings or surplus.

• **General Foods'** president, Austin S. Igleheart, has been named to the Brand Names Day panel of leading executives in the fields of sales, wholesaling, retailing, and consumer research, which will discuss "The Case for Brands and Advertising" at New York's Astoria on April 5. This roundtable meeting will highlight the afternoon session of the fifth annual all-day brand conference to be sponsored by Brand Names Foundation, Inc.

• **Sun-Maid Raisin Growers of Calif.:** Walter K. Hines, general manager, announces the appointment of Carlis H. Neafus as general sales and advertising manager. Mr. Neafus joined the Sun-Maid in 1925.

• **The Borden Co.** reports food sales gained in 1949, in most categories. Borden's American caramel business, started in 1902, was abandoned during the year because of narrow profit prospects.

According to the annual safety report just issued by the company, new all-time safety records were set last year by the Borden Company's 30,000 employees in the U. S. and Canada. Of more than 500 plants and branches reporting, 85 had perfect safety records with no employee injuries or vehicle accidents. More than 95 per cent of the company's employees finished 1949 without a single lost-time personal injury accident.

• **Florasynth Laboratories, Inc.,** announces the issuance of their newest wholesale price list—a 28-page publication covering flavoring, aromatic or essential oil material utilized in the processing of foods, drinks, perfumes, creams, lotions, and soaps.

• **Peanut Planting Reduction:** The Agriculture Department recently called upon farmers to reduce 1950 plantings of peanuts by about 20 per cent from this years acreage, in order to prevent a surplus. An allotment of 2,100,000 acres, or 528,970 less than this year, was announced for 1950.

• **B. W. Dyer & Co., New York,** reports the 1950-51 beet sugar crop is "expected to be substantially increased, possibly equalling or exceeding the quota of 1,800,000 tons." The 1949-50 domestic beet crop amounted to 1,605,796, short tons, raw value, preliminary figures indicate, as compared with 1,313,280 tons for the previous year. The new beet crop will be harvested generally beginning in late September.

• **General Foods Corp.** net sales reached a new high of $474,637,193 during 1949, announced Clarence Francis, chairman, and Austin S. Igleheart, president, in a jointly signed annual report. This compares with net sales of $463,336,031 during 1948. Net dollar earnings were also the best in company history, with $27,445,941 equal, after preferred dividends to $4.77 a common share. In 1948 net earning were $24,555,752, or $4.25 a common share. Common stock outstanding in both years totaled 5,575,463 shares. Dollar earnings in 1949 were "less than six cents out of every dollar of sales. This is a slight increase over 1948." Sales were up 2½ per cent.

KIWI CODE DATER

Easily attaches to any conveyor. Operates in any position—top, side, or bottom. Any numeral or letter combination. Once a day service. An automatic marker and pricer at reasonable cost, that spots mark where you need it. Helps stock rotation at all points. For details, write:

KIWI CODERS CORP.
3804 N. Clark St., Chicago 13, Ill.
Inks for Any Surface

RIBBONS for your *Candies*
Satins • Moires • Taffeta
Gros-Grain • Rib-o-nit
Rayon and Chiffon
R. C. TAFT CO.
111 NORTH CANAL STREET
CHICAGO 6, ILLINOIS

9,500
Volume Buyers Read
CANDY MERCHANDISING
For Advertising Rates, write
CANDY MERCHANDISING
9 S. Clinton St., Chicago 6, Ill.

plant sanitation and housekeeping

(*Continued from page 36*)

distrust and abuse. With effective direct lighting, thorough cleaning of seat and fixture can be evident to the user. Such lighting reduces loitering in stalls and room, and facilitates the whole maintenance job.

A common industrial toilet defect is the use of individual wash basins, particularly when they are equipped with spring faucets. It is impossible to wash face and hands in such a fixture except in the soil left by all previous users since its last cleaning. The answer to this problem is the wash fountain, preferably in stainless steel, at which six to eight persons at a time can wash in a stream of tempered, unsoiled water actuated by a foot pedal. The cleaning labor and the mechanical maintenance of such fixtures are reduced to a fraction of the old style equipment, less area is required, and wall space is left clear.

• • •

ADDITIONAL HELPFUL REFERENCES *on candy plant sanitation and housekeeping will be found in the following recent articles in* THE MANUFACTURING CONFECTIONER:

New NECCO Restrooms Highlight Sanitation, p. 31, *February*, 1949.

How to Control Dust Hazards, by C. O. Dicken, p. 24, July, 1949.

Insect Control and Sanitation, by George E. Gould, p. 24, October, 1949.

How Williamson Stresses Sanitation, by Ralph Iula, Jr., p. 33, October, 1948.

A Complete Sanitation Program for Candy Plants, by Alfred E. Leighton, p. 13, September, 1948.

The Human Factor in Sanitation, by Alfred E. Leighton, p. 51, February, 1948.

Infestation Control in Candy Plants, by Milton E. Parker, p. 29, July, 1947.

Sanitation Vital in Industry, by Paul A. Brehm, M.D., p. 30, March, 1947.

Pest Control in the Candy Plant, by Clyde C. Hall, p. 27, October, 1946.

How to Improve Machine Sanitation, by Charles R. Adelson, p. 31, September, 1946.

Unsanitary Conditions Sabotage Your Sales Department, p. 23, February, 1946.

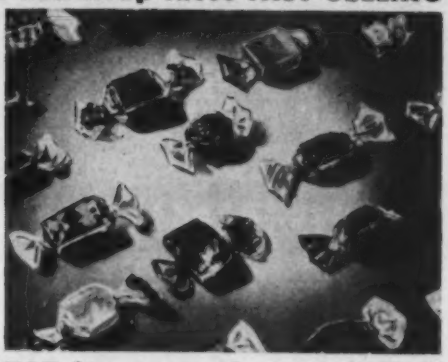
• • •

Source of Odors

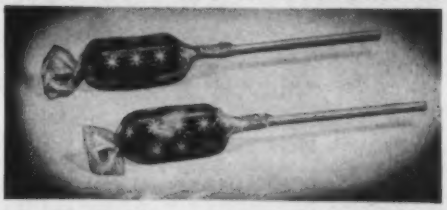
The most prolific source of odors in men's toilets is the urinal fixture. The old stall type, recessed in the floor, has a major maintenance problem due to the stench and ultimate clogging caused by the incrustation of salts in the drop pipe in which decomposing organic matter is retained. No amount of disinfectant or deodorant will correct this condition but it can be simply dealt

(*Please turn to page 84*)

NOW-You Can Wrap these FAST-SELLING



PROFITABLE items on the economical



AMF **ROSE I.S.T.** TWIST WRAP Combination MACHINE

NOW AT DEVALUATION PRICES

NOW—wrap irregular shaped candy pieces AND lollypops —ALL ON THE SAME MACHINE! Twist-wrapped irregular shaped pieces are turned out at speeds up to 160 per minute. Lollypops are wrapped at speeds up to 110 per minute by twist wrapping along the stick and putting an attractive fantail on the pop end. Confectioners now using the ROSE I.S.T. Combination Machine enthusiastically report increased sales because these eye-catching fantailed-pops sell themselves to youngsters and adults alike!

INDIVIDUALLY WRAPPED candies will increase impulse buying. Colorful wraps seal out dirt and moisture and protect against handling, yet produce attractive, appetizing displays, *with brand identification on each piece!*

WRITE Mr. B. L. Ahrens for complete specifications and devaluation prices on the I.S.T. TWIST WRAP COMBINATION MACHINE and other AMF ROSE Candy Machinery. American Machine & Foundry Company, 485 Fifth Avenue, New York 17, N.Y. or to Mr. Charles L. Clock, West Coast Sales and Service Headquarters — 1258 Mission Street, San Francisco 3, California.

AMF **ROSE CANDY MACHINERY**

The MANUFACTURING CONFECTIONER'S Clearing House

POSITION WANTED

POSITION WANTED: College Senior, Business Administration Major, wishes job for rest of 1950 with a manufacturer of high grade chocolates, in production dept. Salary not so important as opportunity to learn and advance. Box No. A-406, **The MANUFACTURING CONFECTIONER,** 9 So. Clinton St., Chicago 6, Ill.

HELP WANTED

WANTED: Experienced Enrober man to take care of three enrobers—steady work. Give us the name of manufacturers by whom you have been employed for the past 10 years and wages expected. All correspondence strictly confidential. Box TF-408.

SALES LINES WANTED

WANTED: Candy and allied lines. We have 20 years sales experience in same territory of Florida, Georgia and Alabama. 3 salesmen. Hubert Brokerage Company, 210-211 Candler Bldg., Atlanta, Georgia.

BROKERS WANTED

WANTED: Brokers and representatives wanted throughout U.S.A. by New California company making a complete line of quality candies. Bulk, packaged, novelties, and ice cream candies at competitive prices. Box 6699, Los Angeles, California.

BUSINESS FOR SALE

FOR SALE—One of the finest wholesale and retail small candy manufacturing businesses in Toronto, Canada. Best business section. Will stand fullest investigation. Owner wishes to retire. Box C-205 **The MANUFACTURING CONFECTIONER.**

Whether you're buying or selling, classified ads in The MANUFACTURING CONFECTIONER bring quick results. Low cost is only 35 cents a line, 70 cents for bold face.

CLASSIFIED ADVERTISING

When addressing box numbers, please address as follows:
(Box Number)
The Manufacturing Confectioner
9 South Clinton St.
Chicago 6, Ill.

Classified insertion requests are sent to the same address. Rates are 35c per line of regular type; 70c per line for bold face or capital letters; $6 per column inch for display. Minimum insertion is three lines. Rates are not subject to agency discounts.

Brokers . . .

For new candy lines, list your firm in the Confectionery Brokers' Section of THE MANUFACTURING CONFECTIONER and THE CANDY BUYERS' DIRECTORY. Low rate is only $15 a year.

THE MANUFACTURING CONFECTIONER
9 S. Clinton St. Chicago 6, Ill.

PERSONAL

Will anyone knowing whereabouts of Ed Faierheller please ask him to communicate with Harry Lataner, Box 251, Phila., Pa.

WILL TRADE

WILL TRADE: Package K. H. long taffy machine in excellent condition for 16" enrober, one sizer, two caramel cutters. Box A-404, **The MANUFACTURING CONFECTIONER,** 9 So. Clinton St., Chicago 6, Ill.

MISCELLANEOUS

WE BUY & SELL

ODD LOTS • OVER RUNS • SURPLUS

"Cellophane" BAGS

SHEETS • ROLLS • SHREDDINGS

Cellophane rolls in cutter boxes 100 ft. or more

ALSO MADE OF OTHER CELLULOSE FILM

Wax - Glassine Bags, Sheets & Rolls

Tying Ribbons—All Colors & Widths — Scotch Tape Clear & Colors

Diamond "Cellophane" Products

Harry L. Diamond Robert I. Brown
"At Your Service"
74 E. 28th St., Chicago 16, Illinois

MISCELLANEOUS (Contd.)

FOR SALE: 1 million 2½ and 1 million 3 x 10 sheets Fresh stock Du Pont 300 moisture proof cellophane at ½ the price of today's market. Sogas Candy Co. 711-713 East 31st St., Kansas City, Missouri.

CELLOPHANE WANTED: Cut sheets or rolls. Please advise sizes, quantities, type of material, colors. No quantity too large or too small. Box C-402, **The MANUFACTURING CONFECTIONER,** 9 So. Clinton St.

Chicago manufacturer has blunt round wood sucker sticks 4½" x 11/64" price 55c per M, F.O.B. Chicago. Box B-307, **The MANUFACTURING CONFECTIONER,** 9 S. Clinton St., Chicago 6, Ill.

FOR SALE: Outright or contract basis, outstanding CANDY BAR FORMULA. Distinctively different. Described by Nation's foremost candy Co. as "truly a delicious confection". Box A-4010, **The MANUFACTURING CONFECTIONER,** 9 So. Clinton St., Chicago 6, Ill.

MACHINERY WANTED

WANTED: one used 3 ft., ball beater, state condition and price. Box C-104 **The MANUFACTURING CONFECTIONER.**

WANTED TO BUY: 2 Werner 350 pound cream breakers. State condition and price. Please give number of machine. Box C-101 **The MANUFACTURING CONFECTIONER.**

WANTED: Hollow Chocolate machinery wanted, tumbling machines, depositor, chocolate tempering machine, melting kettles. R. M. Palmer, 614 Columbia Ave., Sinking Spring, Penn.

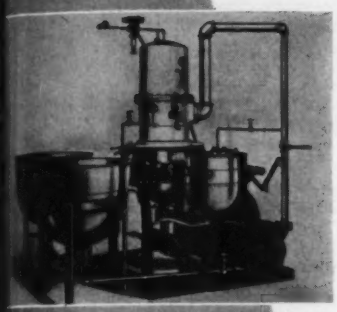
FOR SALE—PIECEMEAL

EXCELLENT MACHINERY AND EQUIPMENT

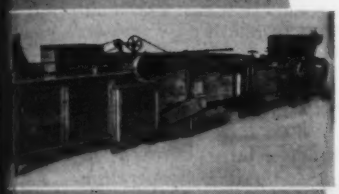
direct from floors of 2 plants

MUST BE MOVED IMMEDIATELY

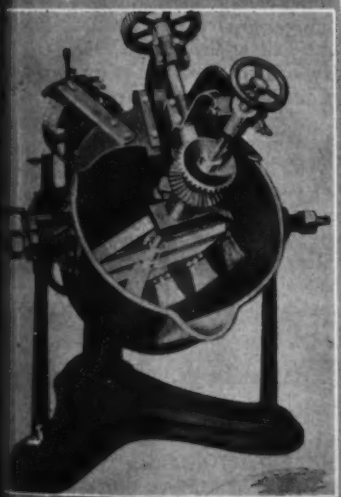
Specially Priced for Quick Sale



...al Equipment Continuous Hard Candy ...er, 600 and 1000 lbs. hourly capacities.



...onal Equipment Fully Automatic Wood ...ul.



...ge Type F6 Double Action Patent Tilting ..., 50 gal. cap.

WASHINGTON COURT HOUSE CANDY CO.

Washington Court House, Ohio

Partial List of Equipment

HARD CANDY DEPT.

1 — National Equipment Hard Candy Cooker, 600 lb. cap.
2 — Stainless Steel Kettles, 100 gal. cap., used for pre-cooking with quick-acting valves, 125 lb. pressure.
1 — Berks Batch Mixer.
1 — Gas Simplex Vacuum Fire Cooker with 2 Kettles, Stove, and separate Pump.
2 — Hildreth Form 3 Pullers, motor driven.
2 — Model K Kiss Machines.
Batch Rollers — Cooling Tables.

MIXING EQUIPMENT

5 — Baker Perkins JNM Mixers, motor driven.
2 — Werner and Pfleiderer 150 gal. Mixers, motor driven.

MOULDING DEPT.

1 — Wood Mogul with 7 Pump Bars, assorted sizes.
1 — Baker Perkins Steamer and Sander.
9,000 Starch Trays, 14½" x 32"
1 — 80 gal. Savage Marshmallow Beater.
Gum and Caramel Kettles

CHOCOLATE COATING DEPT.

1 — 24" Enrober and Tunnel and individual Freon Cooling System.
1 — 2TH Mikro Pulverizer with Hopper.
1 — National 16" Enrober, complete.
6 — 300 lbs. and 500 lbs. cap. Chocolate Melters.

THE BORDEN COMPANY

Dixon, Illinois

Partial List of Equipment

6 — 50 gal. Savage Double Action Patent Tilting Kettles, type F6, Copper and Stainless Steel.
3 — Savage 150 gal. cap. Single Action Gum Kettles.
2 — Thomas Mills Reversible Sizers. 24" x 6" and 30" x 6" Rolls.
20 — Dixon Caramel Wrappers, for wrapping ¾" x ¾" x ½" Caramels.
4 — J. H. Day Jacketed Jumbo Mixers — 10,000 lbs. cap., with Spiral Mixers.
8 — Glass-lined horizontal Glucose Tanks — 20,000 lbs. cap.
20 — Collum Water-Cooled Slabs, 4' x 10', 3' x 8', Steel and Stainless Steel.
1 — Racine Caramel Cutter.
4 — Chocolate Melters.
6 — Revolving Pans, 38".
2 — Flow Master Homogenizers, Model MD-800 and Model 400.
2 — Holm auto. Scale Model C, #75, Table-Type Weighing and Filling Machines.

Complete Box Plant, S. & S. Top & Bottom Wrappers, Gluers, Single & Double Scorers, Corner Stayers, Corner Cutters, Battle Creek Wrapper, Trucks, Scales, etc.

INSPECTION INVITED
Can Be Arranged By Appointment

Our representatives will be on the premises DAILY to show you through the plants.

SPECIAL
Just Secured

STEEL MOGUL. Excellent condition. Just taken out of operation. Will sell at a bargain price. Must be moved immediately.

Act Promptly For Choicest Buy

Quantities are limited and all offerings are subject to prior sale.

UNION
Rebuilt Machinery
Established 1912

...r Information and Full Details Write, Wire ... Phone Collect to Our NEW YORK OFFICE at CAnal 6-5335

We have a complete stock of CONFECTIONERY EQUIPMENT ...very Type—Every Size—For Every Need SEND FOR OUR CATALOG

Union CONFECTIONERY MACHINERY CO., IN
318-322 LAFAYETTE ST. • NEW YORK 12, N

UNION OUR 35th YEAR

MACHINERY WANTED

WANTED: Fully Automatic Lolly pop wrapping machine. Send complete details to: Box A-4011, **The MANUFACTURING CONFECTIONER**, 9 S. Clinton St., Chicago 6, Ill.

WANTED: to Buy—National Equipment steel Mogul. Condition of equipment is not important. State best price & location where machine may be inspected. The DARE COMPANY LIMITED, Kitchener, Ontario, Canada.

MACHINERY WANTED: Fondant Machine wanted—Instant and Continuous type, give age and condition with lowest cash price. Box A-407, **The MANUFACTURING CONFECTIONER**, 9 So. Clinton St., Chicago 6, Ill.

MACHINERY FOR SALE

One Rose R.A.F. 500 wrapping machine. Completely rebuilt. Box TF-303, **The MANUFACTURING CONFECTIONER**, 9 S. Clinton St., Chicago 6, Ill.

MACHINERY FOR SALE (Contd.)

SPARKLER FILTER, Portable, Model CD-18, mild steel, 1000 gal. per hour, equipped with positive pump and compressor. Like new, used only several hours for filtering edible oil. **PRICE $950.00.**

MOREHOUSE HY-R-SPEED MILL, Model SS-20, Serial SS-104, 10 hp., used only two hours. Ideal for low micron milling of seeds or nut meats or for any paste work. **PRICE $1400.**

THE HARRISON CO., 50 Stone St., New York 4, N. Y.

FOR SALE: 1-5 ft. Ball Cream Beater 5 H. P. 3 phase motor. Priced for quick sale. Box A-4012, **The MANUFACTURING CONFECTIONER**, 9 So. Clinton St., Chicago 6, Ill.

FOR SALE: Hollow Chocolate Moulds & Equipment for Store or small Factory. Complete outfit for $1,000. P.O. Box 824, Petersburg, Va.

FOR SALE: Steel Mogul, excellent condition. Just taken out of operation. Will sell at a bargain price to move quickly. Box A-409, **The MANUFACTURING CONFECTIONER**, 9 So. Clinton St., Chicago 6, Ill.

FOR SALE: Model K. kiss wrapper. Hildreth display pulling machine. 80 gallon Savage marshmallow beater. Krimpac wrapping machine. 6-7-8 ft. York batch rollers. 100, 200 & 300 lb. Chocolate melters. 18 inch late style revolving pan. Friend Model F. hand roll machine. 3 x 6 water cooled slabs. 2 ft. Cream beater. Racine sucker & hand goods machine. Savage fire mixers, and power caramel cutter. All equipment for chocolate, cream or hard goods departments. Write, wire or phone your inquiries. National Confectioners Machinery Co., 108 E. 2nd St., Cincinnati, Ohio. Telephone Parkway 1165.

FOR SALE: 1—Hohberger Continuous Hard Candy Cooker 2000 lbs. per hour. 1—Berks Hard Candy Batch Kneader & Mixer. Both in excellent condition. Box A-405, **The MANUFACTURING CONFECTIONER**, 9 So. Clinton St., Chicago 6, Ill.

FOR SALE: A D Mogul, Allis Chalmers Reel, Huhn Drier and Cooler Complete with elevators and conveyors—Available immediately. Box A—401, **The MANUFACTURING CONFECTIONER**, 9 So. Clinton St., Chicago 6, Ill.

Sanitation and Housekeeping

(*Continued from page* 81)

with by using a rubber bladder and air pump to seal the drain at the trap while an acid cleaner is applied and held in the drain long enough to dissolve the scale. A suitable brush can then be used to free the pipe, and the odor is gone, provided the fixture is otherwise clean. A properly maintained and ventilated toilet room requires no deodorant.

Obstruction on the toilet room floor such as stools, supports for toilet stalls, pipes, and waste receptacles interfere with daily floor cleaning and run up the cleaning cost. Some modern toilets present the solution to this problem in which stools and urinals are wall-hung, the toilet stalls suspended from the ceiling, and waste receptacles recessed in the wall. A careful consideration of capital versus maintenance costs should show an advantage for such an installation.

In locker and dressing rooms, over-crowding is the usual difficulty, the correction of which is a management and structural space problem. So far as the Maintenance Foreman is concerned, his job is easier if the lockers are arranged in islands, all out from the wall. In new construction and in presently adequate locker rooms, lockers should be placed on solid cove bases and benches should be cantilever-supported from these bases. Again lighting at 10 foot-candles will promote cleanliness of the room and much greater orderliness within the lockers.

Pest Control

A Maintenance Foreman who is willing to study intelligently a few text books, a lot of technical bulletins, and do a bit of experimentation can develop and operate his own pest control service, using some of the post-war insecticides and equipment. On the other hand, pest control operators are now offering a far better type of service generally and, with understanding cooperation from a Maintenance Foreman, can provide effective control at low cost. In any case, *there is no longer any excuse for an insect infestation in any industrial plant, least of all a food plant.* Residual insecticides, supplementing a thorough job of cleaning and structural maintenance, can eliminate cockroaches, silver fish, lice, fleas, beetles, and weevils, and largely control flies, at a low labor cost provided supervision and inspection are competent.

Rodent control is not so easily achieved or maintained because the essential barriers which constitute rodent-proofing a building tend toward continuous breakdown. Without effective maintenance of rodent-tightness, no other forms of rodent control such as trapping and poisoning are profitable or effective, and the pest control operator who will undertake rodent control without insistence upon rodent proofing and harborage elimination is not worth the money.

Removal of Wastes

Removal of solid production wastes; trash from toilets, warehouse and dock areas; and garbage from cafeteria or lunch room is a job in which careful planning will save handling labor and promote plant sanitation. Local waste receptacles, instead of being haphazard, should be adequate in number and capacity, and designed for the particular waste; collections should be scheduled to keep up with waste production, and disposal should take full advantage of any public collection facilities available.

Wastes which can be salvaged or reused require special handling to segregate them and maintain their values. The Maintenance Foreman should be alert to the possibilities of increased return from potential users. Combustible wastes, if large in bulk and not salvageable at a profit, may warrant the construction of incineration facilities. This method of destruction cuts down storage

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Terr.: Florida, Georgia and Alabama for 20 years

So. Atlantic States (cont'd)

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Terr.: W. Va., Va., N. & S. Caro.

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East No. Central States (contd.)

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"We Are At Your Service Always —And All Ways"
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Territory: Michigan

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Terr: Michigan only
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25 years in the Candy Business

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Candy Specialties
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Terr.: Tex., N. Mex., and Ariz.

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Broker & Agent
BATESVILLE, ARKANSAS
Candy - Novelties - Specialties
Terr.: Arkansas—Accounts solicited

CONFECTIONERY BROKERS

West So. Central States (cont'd)

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Territory: Texas & Oklahoma

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Terr.: Colo., Mont., Idaho, Utah, N. Mex.

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Territory: Arizona, New Mexico, & El Paso, Texas

Mountain States (cont'd)

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Confectionery and Novelty Items
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Complete coverage of Montana, Idaho, and Wyoming.

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Personal service to 183 jobbers, super-markets and department stores. Backed by 26 years experience in the confectionery field. We call on every account personally every six weeks. Candy is our business.

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Pacific States (cont'd)

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Phone: Main 7852
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Terr.: Wash., Ore., Utah, Ida., Mont., Nev., Wyo.

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Candy & Food Specialties
Terr.: Calif., Reno, Nev., Hawaiian Islands

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SAN FRANCISCO, CALIF.
Terr.: Calif., Ore., Wash., Mont., Ida., Utah, Wyo., Nev., Ariz.

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LOS ANGELES 21, CALIFORNIA
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Territory: State of California

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No. Cal.; Nev.; & Hawaii
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923 E. Third St.—Southern California
LOS ANGELES 13, CALIF.
Terminal Sales Bldg.
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SEATTLE 1, WASH.
903 Park Road
Ariz., New Mex., W. Texas
EL PASO, TEXAS

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(Suburban to Los Angeles
terr: California & Arizona

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112 Market St.
SAN FRANCISCO 11, CALIF.
Established 1906
Sell Wholesale Trade Only
Terr.: Eleven Western States

volume and area by permitting more or less continuous disposal, and reduces dependence on outside collectors. However, industrial incinerators require careful design and construction to function properly and to prevent outside nuisance.

In every factory, there is a tendency to store obsolete machinery, parts, and discarded items of all kinds—a practice which complicates housekeeping and uses valuable space. The Maintenance Foreman must be aware of poor cleaning work, ineffective methods or equipment, deterioration of structure or surface, and changes in production items or schedules on the basis of which to shift his personnel, adjust work loads, devise new methods, and bring pressures to bear to keep the sanitation program in balance and moving forward. He can't sit at a desk and do such a job effectively.

Savings Result

However, there is much study and planning required, particularly to improve the efficiency of labor by individual instruction and by group in-service training. Time-motion studies, testing of materials and equipment and control of their use, and scheduling of work can be rewarding in terms of management prestige as well as being profitable. The writer knows of one large plant where, upon the supervision of sundries stocks being transferred to the Sanitation Foreman, careful control of sundries issuance and replacement, salvage of equipment, and better techniques of use resulted in a savings of $4000 the first year. In any large plant where sanitary maintenance has been haphazard, it should be possible for a good Maintenance Foreman to save his salary several times over.

In connection with time and motion studies and analysis of materials, probably the best job in this field has been done by the Industrial Sanitation Research Department of Joseph E. Seagram & Sons, Inc., of Louisville. The series of bulletins issued by this company will be immediately stimulating to any alert Maintenance Foreman and point the way to profitable study and improvement of his own practices.

Invaluable for Smooth Operation

To the responsible plant manager, this quite limited review of the sanitary maintenance job within the manufacturing plant should give a better appreciation of its potentialities if already established. If not established, this discussion should open up a perspective and encourage the correction of a serious management deficiency. Given the proper set-up and backing, a capable man will prove himself invaluable to the manager and to the whole organization in terms of smoother operation, happier employee morale, and improved appearance and hygiene of the industrial environment.

Where management is operating a number of plants, there is the further opportunity to benefit the individual plant maintenance work by establishing a top level direction of the whole company sanitation program. Just as a large industrial organization may have a quality control laboratory, a personnel relations staff, and a legal department, it should likewise be advantageous to employ a sanitary engineer or similarly qualified expert to plan and direct the program, work out the techniques, and evaluate performance in the several plants.

At this mid-point of the twentieth century, the crudities and the filth associated with the earlier stages of the industrial age are disappearing, and industrial sanitation as an integral part of modern mass production is taking its place to bring order and decency into our working hours.

Confectionately Yours

REDS ARE BLUE MEMO: Czechoslovakia's red commissars in charge of Bohemian Easter egg sales are blue about socialist Britain's red tape. Not only that, it's also lamented that "selling to Britain isn't like exporting to America," says The Wall Street Journal. For 140 years Czech liqueur filled chocolate eggs have been a gourmet's delight. For the first time since the war, Britain now permits importing of Czech eggs, but they're coming in hollow. Duty on hollow eggs is 15 per cent. Alcohol content boosts it to 40 per cent. Price control sets 98 cents as tops. "We couldn't charge a price that would begin to cover costs," goes the refrain.

Additional woes come from Britain's candy rationing. For computing values, the eggs must be packed via the English pound-and-ounce weight system. On the continent, grams and kilograms are used. In the U.S. both systems are okay.

As Czech chocolate eggs are "too good a source of foreign exchange" (about $500,000 worth this year, it's estimated), very few are sold in Czechoslovakia. The industry employs about 30,000 mainly in six big plants in and around Prague. They're nationalized. Production is sold through a central government export agency.

In Poland the communists use another distribution technique, with the aim of discouraging religious practice, says the United Press. Teachers urge kids to pray to God for candy. When none comes, they suggest praying to Stalin. Next day they get candy.—CCH

SWEETEST GIRL IN THE WORLD, according to the Western Candy Conference, meeting at the Hollywood Roosevelt Hotel April 17-18, is June Haver, (above).

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Candy Presstime News

• **Macy's** is carrying the Lindt chocolates from Lindt and Sprungli Co., in Zurich, Switzerland. (see the February, 1950, issue, p. 23—Ed.). The first shipment, recently arrived, ranges from a box priced at $3.50 to the 3-oz. bar for 39 cents. Special promotion and advertising heralded the arrival. Macy's is also carrying cordial filled hard candies which have been brought into this country from Europe by the Heller company. These are a hard candy jacket with five different cordial centers, including chocolate, raspberry, orange, mint, and liquors. Each piece is individually wrapped in color according to flavor. These sell in bulk at 69 cents per pound. Tasting samples have been available to the Macy customer, and even without special advertising the line has been very successful, it is reported.

• **Ambrosia Chocolate Co.** has named L. Russell Cook to an executive position, it is reported. Mr. Cook was formerly vice-president and general sales manager of Wilbur-Suchard Chocolate Co. Before that he was a vice-president of W. A. Cleary Corp.

• **NCA's Production Forum Answer Panel** at the 67th annual convention's production forum session June 6 will include these members, announces W. Tresper Clarke, of Rockwood & Co., Brooklyn, who is chairman:

J. J. Alikonis, Paul F. Beich Co., Bloomington, Ill.; Charles Carelli, Edgar P. Lewis & Sons, Inc., Malden, Mass.; W. Tresper Clarke, Rockwood & Co., Brooklyn, N. Y.; Morris Cushman, Overland Candy Co., Div. of Leaf Brands, Inc., Chicago; Frank R. DeRoeck, James O. Welch Co., Cambridge, Mass.; James A. King, Nulomoline Div., American Molasses Co., New York; forum moderator, G. Lloyd Latten, Schutter Candy Div., of Universal Match Corp., Chicago; Gordon Maybee, Fry-Cadbury Ltd., Montreal, Canada; Walter L. Richmond, Garrott Candy Co., St. Paul; and Oscar Stout, Ross & Rowe, Inc., New York.

• **American Maize-Products Co.** announces the appointment of the Thomas E. O'Neill Co., Chicago, as exclusive broker representative for all bulk products. The appointment covers Cook County, in Illinois, excluding the city of Barrington plus Zion, in Lake County.

• **The Packaging Institute's** 12th annual forum will be held October 23-25 at the Hotel Commodore, New York, announces Charles L. Barr, president.

• **International Congress of Chocolate and Cocoa Manufacturers,** to be held in Lausanne, Switzerland, September 18th-23rd, 1950, will have the following items on the agenda: (1) Reexamination of the definitions relating to cocoa and chocolate adopted by the Antwerp Congress in 1930; (2) standardization of the methods of analysis of cocoa and chocolate; (3) adoption of a commercial index for cocoa beans; (4) report of each national association of chocolate and cocoa makers on its organization and on the services created for the benefit of its members; (5) statistics relating to raw cocoa as to the production or to the sale of chocolate and cocoa products; (6) questions relating to raw cocoa; (7) decimal biblographic classification relating to cocoa products; (8) various taxes on chocolate and cocoa high class products of general consumption.

• **Exhibitors at NCWA's Candy Exposition,** to be held in conjunction with the fifth annual convention of the National Candy Wholesalers' Ass'n., May 31-June 3, in New York's Commodore Hotel, as announced at presstime, include:

Hershey Chocolate Corp., Hershey, Pa.
Walter Baker Chocolate & Cocoa Div. of General Foods Corp., Dorchester, Mass.
James O. Welch Co., Cambridge, Mass.
Switzer's Licorice Co., St. Louis.
R. L. Albert & Son, Inc., New York.
Mars, Inc., Chicago.
Miss Morris Chocolates, Minneapolis.
Fred W. Amend Co., Danville, Ill.
Reed Candy Co., Chicago.
Thinshell Candies, Inc., Chicago.
Thomas D. Richardson Co., Philadelphia.
Paul F. Beich Co., Bloomington, Ill.
Charms Sales Co., Asbury Park, N. J.
Henry Heide, Inc., New York.
Howard D. Johnson Co., Wollaston, Mass.
E. J. Brach & Sons, Chicago.
Chase Candy Co., St. Louis.
Jack Newberg Co., The Bronx, N. Y.
Tasty Candy Product, Inc., New York.
Ce De, Inc., Bloomfield, N. J.
Philadelphia Chewing Gum Corp., Haverton, Pa.
Oscar Schreyer Co., New York.
Prince Castle Sales Div., Inc., Chicago.
Beehler Arts, New York.
Rockwood & Co., Brooklyn.
Manco Watch Strap Co., Inc., New York.
Lamont, Corliss & Co., New York.
The Waddell Co., Inc., Greenfield, Ohio.
Popcorn Service Co., New York.
Leaf Brands, Inc., Chicago.
The Julep Co., Chicago.
Milko Cone & Baking Co., Inc., Chicago.
Sweets Co. of America, Inc., Hoboken, N. J.
Quaker City Choc. & Conf. Co., Philadelphia.
Majesty Confections Co., Philadelphia.
Illinois Baking Corp., Chicago.
Squirrel Brand Co., Cambridge, Mass.
Fascination Candy Co., Inc., Chicago.
Pond's Extract Co., New York.
Miss Saylor's Chocolates, Inc., Alameda, Calif.
Duchess Doll Corp., Woodside, L. I., N. Y.
F. & F. Laboratories, Chicago.
Candy Crafters, Inc., Lansdowne, Pa.
Robert A. Johnston Co., Milwaukee.
Kidde Manufacturing Co., Inc., Bloomfield, N. J.
Clyde Collins, Inc., Memphis.

• **Hartley Sales Co.,** San Francisco, is now handling distribution of "Fan-Tan Gum," for the Fan-Tan Gum Co., of Dayton, Ohio, and "Duke's Amoniated Gum," product of True Health Chemical Products Corp., Bradford, Pa. The Hartley firm handles the distribution of these products in California, Oregon, and Washington.

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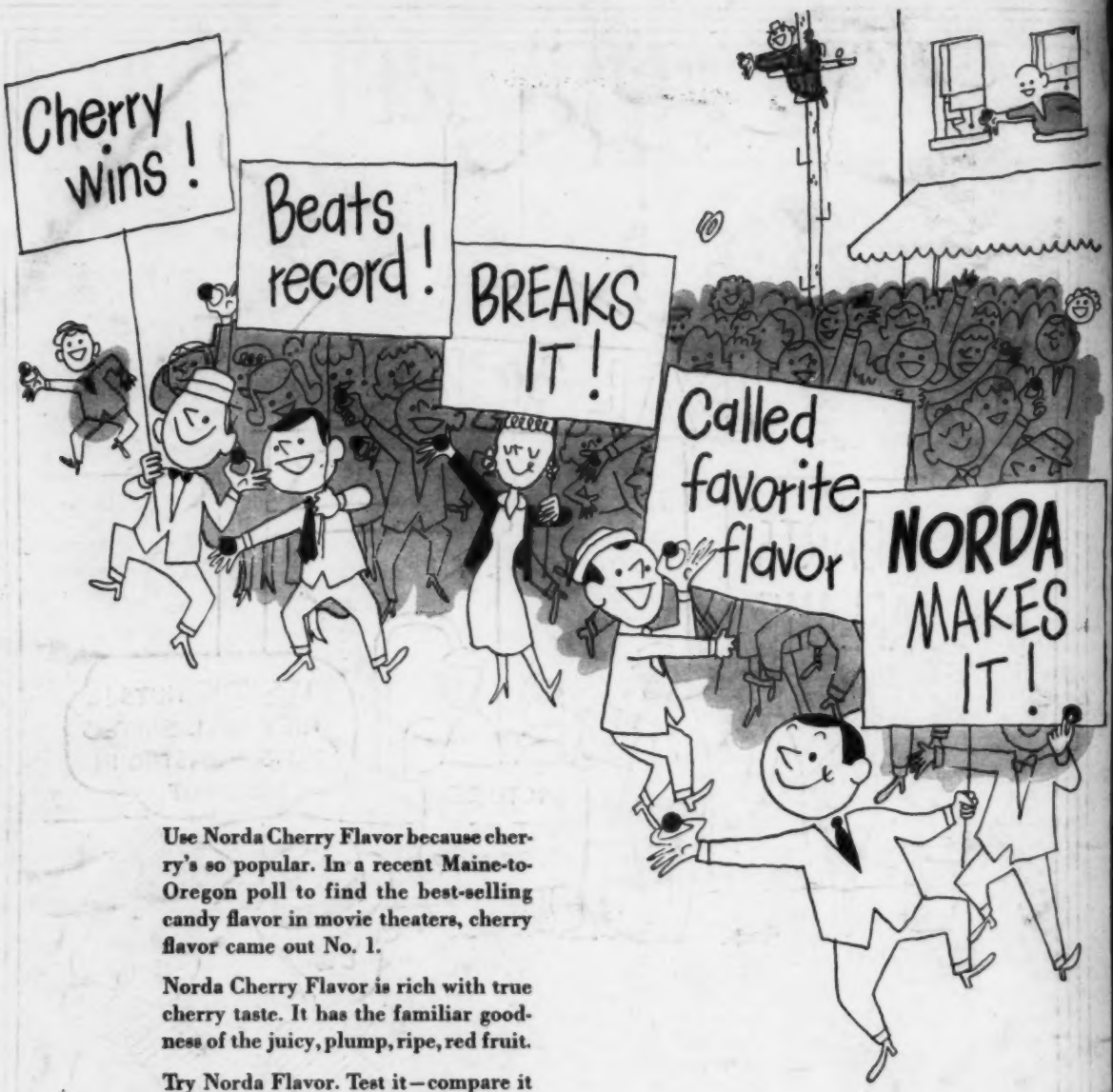

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